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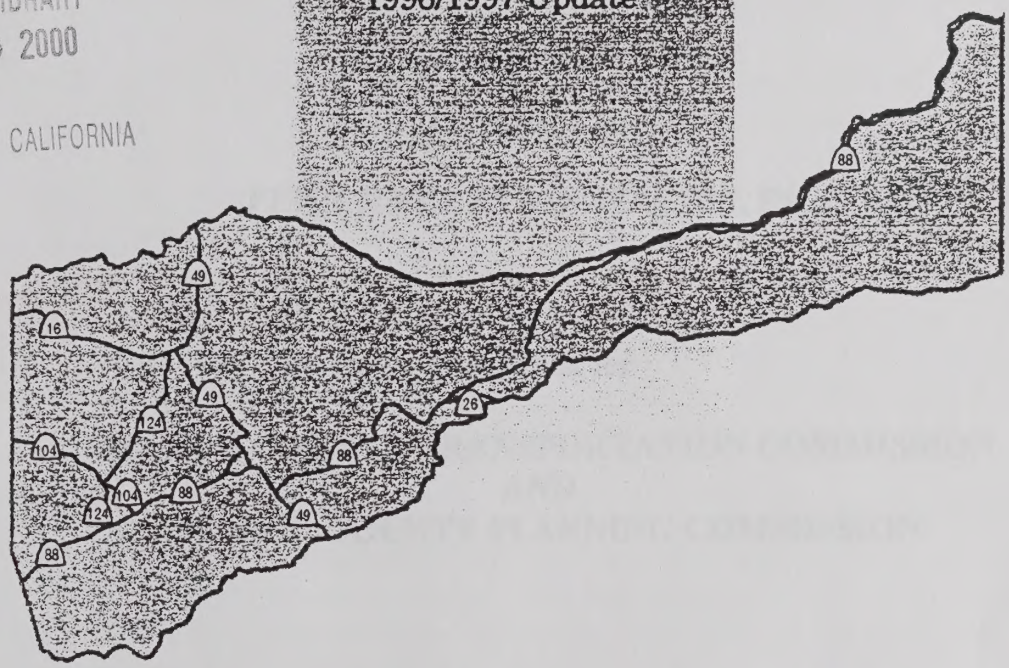
1996/1997 Update



Adopted as the

CIRCULATION ELEMENT

OF THE AMADOR COUNTY GENERAL PLAN

by the Amador County
Board of Supervisors
on June 2, 1998

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AMADOR COUNTY REGIONAL TRANSPORTATION PLAN AND CIRCULATION ELEMENT

1996/1997 UPDATE

REVISED REPORT
DECEMBER 1997

Prepared by

FEHR & PEERS ASSOCIATES, INC.

Prepared for

AMADOR COUNTY TRANSPORTATION COMMISSION
AND
AMADOR COUNTY PLANNING COMMISSION

PLANNING COMMISSION MEMBERS:

Connie Sherrill, District I
Hap Evans, District II
Barbara Sinnett, District III
Gerald Mandeson, District IV
Donald Potter, District V

BEFORE THE BOARD OF SUPERVISORS OF THE
COUNTY OF AMADOR, STATE OF CALIFORNIA

IN THE MATTER OF:

RESOLUTION AMENDING THE CIRCULATION ELEMENT OF THE AMADOR COUNTY GENERAL PLAN BY ADOPTING THE REGIONAL TRANSPORTATION PLAN AS THE CIRCULATION ELEMENT	)	RESOLUTION NO. 98-183

WHEREAS, the "State Planning and Zoning Law" and CalTrans Codes in the Government Code require the County to adopt both a Circulation Element of the County General Plan and a Regional Transportation Plan (RTP); and

WHEREAS, these two mandated documents are very similar in nature and involve duplicative planning efforts if done separately; and

WHEREAS, they can be combined into a single document meeting both requirements of the Government Code if adopted by both the Local Transportation Commission and the Board of Supervisors

BE IT RESOLVED that the Board of Supervisors of the County of Amador does hereby adopt this resolution amending the Amador County General Plan, Circulation Element, by adopting the 1996/97 Regional Transportation Plan as the Circulation Element.

BE IT FURTHER RESOLVED that the Board of Supervisors hereby affirms the certification of the EIR made by the Planning Commission with the additional findings that the document is adequate to identify and mitigate environmental impacts to the degree necessary to serve as the environmental document required by CEQA for the adoption of the Circulation Element of the County General Plan. The Board additionally adopts the findings of the Local Transportation Commission on their certification of the EIR.

The foregoing resolution was duly passed and adopted by the Board of Supervisors of the County of Amador at a regular meeting thereof, held on the 2nd day of June, 1998, by the following vote:

AYES: Richard P. Vinson, Louis D. Boitano, Edward T. Bamert, Mario Biagi and Rich F. Escamilla
NOES: None
ABSENT: None

Chairman, Board of Supervisors

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EXECUTIVE SUMMARY

The 1996/97 Amador County Regional Transportation Plan (RTP)/Circulation Element documents the policy direction, actions and funding recommendations designed to meet the short-range and long-range needs of the County's transportation system. This report was developed to serve the County's projected travel demand over the next twenty years based on development plans in the five Cities and the unincorporated areas of the County. The Plan was based on the results of a comprehensive County-wide study completed in 1994 and updated in 1996 and 1997. It involved realistic land use projections, a new traffic model, an evaluation of improvement needs and options, and an assessment of funding constraints. This document reflects the joint approval of both the Amador County Transportation Commission and the Amador County Board of Supervisors.

The Plan includes a series of actions intended to provide a multi-modal transportation system to best serve both residents and the many visitors in Amador County. Several new and improved roadways are proposed, along with the expansion of transit services, bikeways pedestrian ways, and aviation facilities. In addition, transportation systems management (TSM) measures are proposed in order to minimize single occupant automobile travel.

Accompanying the 1996/97 RTP/Circulation Element is a new program-level environmental impact report (EIR). The EIR addresses the potential environmental effects of the Plan and proposes programmatic mitigation measures to guide review of corridor-specific issues as improvements are implemented.

In the 1996 State Transportation Improvement Program (STIP), the California Transportation Commission made a commitment to Amador County by funding the first phase of the State Route 49 Bypass of Sutter Creek. Subsequent phases of this project continue to be the County's highest priority in the 1996/97 RTP. Additional funding is needed to ensure timely progression of this project that is of significance to both the County and the State of California.

This document includes a realistic assessment of available funding for improvements. The State Route 49 Bypass of Sutter Creek and Amador City would likely consume all of Amador County's allocation of State funds for the next eight years. Subsequent to the completion of the 49 Bypass, the County's next highest priorities include State Route 88 in Martell, Jackson, Pine Grove, and Pioneer, and State Route 104 in Ione. Improvements to State Route 49 in Plymouth and Drytown will also be priorities.

Funding for these and other listed priorities will likely not be fully available from the State. Local agencies must also take some responsibility for a share of the needed improvements. As such, the ACTC is currently in the process of developing a County-wide regional traffic mitigation fee to be assessed on new development. The fee revenue is earmarked for a local share of important improvements to the regional system, most of which are on the State

Highway System. Funds are programmed for new highway capacity improvements, park-and-ride facilities, and critical State Highway Operations and Protection Program (SHOPP) projects. Amador County believes that this "self help" approach will enhance the competitiveness of the County for State and Federal discretionary projects and accelerate the implementation of improvements.

Even with the regional fee in place, additional funds will be necessary to achieve the objectives of the Plan. Of approximately $40 million needed from local sources, less than half may actually be raised by the mitigation fee. This is partly because the State's implementation of recently adopted Senate Bill 45 may reduce the amount of discretionary funds that are available. This means local governments will need to downscope and economize and find other sources of revenue.

The funding strategy contained in this report relies upon the State Highway Operations and Protection Program (SHOPP) and the Caltrans Minor Program to help fund needed regional improvements. The County will need to pursue these funding sources with diligence and success or the amount that will need to be made up from local sources will increase. In addition to the proposed traffic mitigation fee, this document recommends that a county-wide financing mechanism such as a local option sales tax be put before the Amador County voters. Although not typically popular in rural counties, an action such as this will be necessary to fully meet the County's needs. This is especially true if ongoing road maintenance needs are considered as well as the new capital facilities identified in this plan.

I. INTRODUCTION

In 1987, the Amador County Transportation Commission (ACTC) conducted a County-wide circulation study which formed the basis for subsequent Regional Transportation Plans (RTPs). As a part of this study, a regional travel demand model was developed to forecast future year traffic and to plan circulation improvements. Traffic forecasts were based on land use assumptions for buildout conditions as dictated by staff and individual property owners. The resulting transportation plan included the proposed widening of several state and local routes as well as the provision for some new routes to ensure acceptable operations.

The improvements developed as a part of the 1987 study served as the basis for subsequent RTPs including the 1988, 1990, 1992 and 1993 versions. In 1994, the County conducted the first major update since 1987. A comprehensive study of the circulation needs was conducted including the development of a new County-wide traffic model and an assessment of the impacts of more realistic growth projections on the transportation system. The 1994 study was used as the basis for the 1994 RTP update.

In 1996, the studies completed in 1994 were updated in conjunction with the 1996/97 RTP update effort. Specifically, the needs assessment was revisited in light of lower growth assumptions and a greater understanding of the funding constraints.

STUDY PROCESS

The study was directed by representatives from Amador County, each City, and the ACTC. Additional input from California Department of Transportation (Caltrans) representatives was provided through review of this report.

The study was conducted in three major steps. Each step was documented with a technical memoranda that was presented to the County for review and approval. The following describes the content of each document.

- *Growth Projections* were summarized in a September 6, 1996 technical memorandum, which documented the land use growth projections for the study area. These were used to forecast travel growth.

- *Deficiencies and Improvement Options* were identified in a November 4, 1996 technical memorandum. Future year traffic forecasts, deficiencies in the transportation system and potential improvement options were presented in this document.

- *Analysis of Improvement Options,* documented in the February 27, 1997 report, provides an assessment of improvement options and recommendations for a preferred plan. Factors considered in this analysis included cost, benefit to traffic operations, and financial and environmental constraints. Public meetings were held at both the ACTC and Board of Supervisors' meetings to discuss the options.

The results of these documents and the comments received from the various public meetings that were held to review these documents were used as the basis for the Revised Draft Update of the 1996/97 Regional Transportation Plan/Circulation Element. The Final Report was prepared based on additional comments received from the public and further direction by the ACTC and the Amador County Board of Supervisors.

PURPOSE OF THE PLAN

According to the California Transportation Commission's Regional Transportation Plan Guidelines, December 10, 1992, the purpose of a Regional Transportation Plan is to:

- Provide the foundation for transportation decisions by local, regional and state officials;

- Identify and document the region's mobility needs and issues;

- Attempt to resolve regional mobility issues and provide policy direction for local plans;

- Document the region's goals, policies and objectives for meeting current and future transportation mobility needs and for implementing the transportation measures relative to air quality requirements;

- Set forth an action plan to address transportation issues and needs consistent with regional, state and federal policies;

- Identify an action program and schedule to achieve the performance standards and emissions reductions required of transportation sources under the State and federal Clean Air Acts;

- Identify transportation improvements in sufficient detail to aid in the development of the Regional Transportation Improvement Program (RTIP) and State Transportation Improvement Program (STIP) and to be useful in making decisions related to the development and growth of the region, and to permit an estimate of emissions impacts for demonstrating conformity with the State Implementation Plan (SIP) for achieving air quality standards;

- Identify those agencies responsible for implementing the action plans;

- Document the financial resources needed to implement the region's transportation plan and meet required emission reductions and performance standards; and

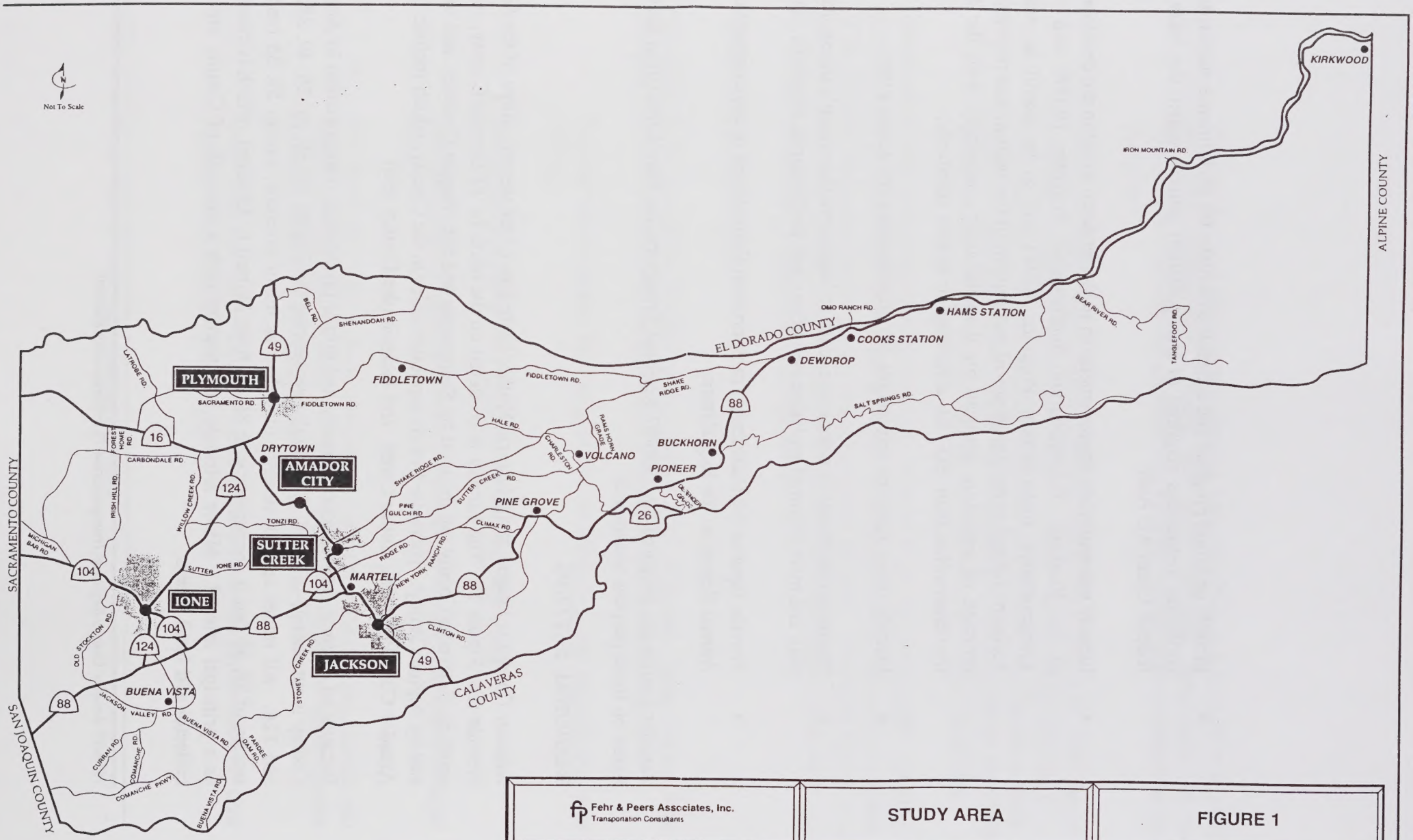
- Provide input to the California Transportation Commission in development of its Annual Report to the Legislature.

Amador County has prepared the 1996/97 Regional Transportation Plan/Circulation Element based on these purpose statements.

REGIONAL SETTING

Amador County is located in the historic Mother Lode area of the western slope of the Sierra Nevada (see Figure 1). The County is bordered on the north by El Dorado County, on the south by Calaveras County, on the west by Sacramento and San Joaquin Counties, and on the east by Alpine County. There are five incorporated cities in the County, which include Ione, Amador City, Plymouth, Sutter Creek, and Jackson (the County seat).

Because of its rural nature, sparse density and public preference, transportation in Amador County is automobile-oriented. State highways serving the County are SR 16, 26, 49, 88, 104 and 124. All routes are functionally classified as minor arterials, except SR 88 (and the section of SR 49 that is concurrent with SR 88 from Martell to Jackson), which is classified as a principal arterial. Minor arterials interconnect with a network of County and city collector and local streets.


Not To Scale
KIRKWOOD
IRON MOUNTAIN RD.
ALPINE COUNTY
BEAR RIVER RD.
TANGLEFOOT RD.
HAMS STATION
COOKS STATION
DEWDROP
OMO RANCH RD.
EL DORADO COUNTY
SALT SPRINGS RD.
SHAKE RIDGE RD.
FIDDLETOWN RD.
FIDDLETOWN
BUCKHORN
PIONEER
VOLCANO
RAMS HORN GRADE
CHARLESTON RD.
HALE RD.
PINE GROVE
CLIMAX RD.
SUTTER CREEK RD.
PINE GULCH RD.
SHAKE RIDGE RD.
BELL RD.
SHENANDOAH RD.
PLYMOUTH
SACRAMENTO RD.
FIDDLETOWN RD.
LATROBE RD.
FOREST HOME RD.
CARBONDALE RD.
DRYTOWN
AMADOR CITY
IRISH HILL RD.
WILLOW CREEK RD.
TONZI RD.
SUTTER CREEK
RIDGE RD.
NEW YORK RANCH RD.
MARTELL
CLINTON RD.
MICHIGAN BAR RD.
SUTTER
IONE RD.
IONE
OLD STOCKTON RD.
JACKSON
STONEY CREEK RD.
BUENA VISTA
JACKSON VALLEY RD.
BUENA VISTA RD.
PARDEE DAM RD.
CURRAN RD.
COMANCHE RD.
COMANCHE PKWY.
BUENA VISTA RD.
SACRAMENTO COUNTY
SAN JOAQUIN COUNTY
CALAVERAS COUNTY
16
49
124
104
88
26
Fehr & Peers Associates, Inc.
Transportation Consultants
STUDY AREA
FIGURE 1

RCH 21, 1997

COORDINATION WITH OTHER PLANS AND STUDIES

During development of the 1996/97 RTP/Circulation Element Update, existing plans, policy documents and studies addressing transportation in Amador County were reviewed. A complete listing of reference documents is contained in Appendix A.

As part of the 1996/97 Amador County Regional Transportation Study, the Circulation Elements for Jackson and Ione were updated. This information has been included in the 1996/97 RTP/Circulation Element. Another study that will affect regional transportation planning is the major update of the 1980 Bicycle Plan being prepared by Amador County Transportation Commission staff as funds are available.

PLAN ASSUMPTIONS

All future plans require that certain assumptions be made about future conditions. The following assumptions must hold for this plan to remain valid. Should these conditions change significantly, the plan must be adjusted. The assumptions used in preparing this update are consistent with the assumptions used in all other related studies reviewed for this update.

1. The population of Amador County will increase at a rate slightly less than the State Department of Finance estimates.

2. Fuel will continue to be available with prices continuing to fluctuate.

3. The automobile will continue to be the primary choice for travel by residents of this rural county.

4. Recreation-oriented travel will continue to be a major user of State highways in the County.

5. Transit service demand will continue to grow, primarily by the increasing number of elderly and handicapped persons residing in the County.

6. Transportation financing will be the same as presently exists at the local, state and federal levels. These levels will not keep pace with the increasing needs of the County.

7. The County's increase in population will continue to be disproportionate compared to employment and housing causing further increases in inter-county commuting.

CITIZEN PARTICIPATION PROGRAM

Many opportunities are provided for public input into the RTP/Circulation Element update process. Numerous public meetings were held during the preparation of the reports including the following key milestones of the study:

- Project initiation to solicit input on the process and work scope;
- Review of deficiencies and the list of improvement options;
- Review the recommendations for the major road system; and,
- Review the public draft report.

The Amador County Public Works staff is frequently used by the public as a source of information concerning transportation matters. Public participation is encouraged at every monthly meeting of the ACTC. Each year public notification is sent out to encourage participation in the ACTC's unmet transit needs hearings. The RTP and its environmental document are adopted following a well-advertised public review period and public hearing.

ORGANIZATION OF THE RTP

This report is divided into seven sections as described below.

I. Introduction

This section provides background information regarding the history of regional transportation planning in Amador County along with descriptions of the study process, the purpose of the plan, the regional setting, the relationship of the plan to other studies and plans, and the citizen participation program.

II. Assessment of Needs

The assessment of needs identifies the existing and future deficiencies of the transportation system that are of both regional and state significance. It also includes a description of the methodology used to develop travel demand forecasts and to analyze traffic operations.

III. Policy Element

The policy element contains the goals, objectives, and policies that address transportation issues by mode. In addition, statewide and regional issues are discussed.

IV. Action Element

The action element describes the state and regional transportation planning processes, as well as the process undertaken to evaluate various improvement options. Specific improvements are identified for short-range and long range capital programs designed to meet the anticipated needs. Implementation cost estimates and responsible agencies are also identified.

V. Financial Element

The Financial Element lists the costs, revenues, deficits/surpluses for each transportation mode. In the cases where a funding deficit exists, a discussion of those improvements that are financially feasible is presented along with an assessment of the resulting impacts of the funding shortfall. Finally, alternative funding sources are discussed.

VI. Environmental Review

The environmental review briefly describes the environmental review processes and the separate program-level environmental impact report that has been prepared for the 1996/97 RTP Update.

VII. Appendices

Supplemental information is presented in the Appendices to this document including a list of reference documents, a glossary of terms and other technical information. In addition, this document utilizes the information developed as background studies and working papers for the concurrent studies including the Martell Area Circulation Plan, the Ione Circulation Element, the Jackson Circulation Element, and the Amador County Regional Transportation Plan.

II. ASSESSMENT OF NEEDS

The assessment of needs identifies the existing and future deficiencies of the transportation system that are of both regional and state significance. Although not required as a separate section, this discussion provides the basis for improvements proposed in the Action Element.

EXISTING NEEDS

The discussion of existing needs initially focuses on current socioeconomic and travel conditions. The current condition of each travel mode is then addressed.

Socioeconomic Conditions

Existing transportation needs stem from travel demand, which is influenced to some degree by current socioeconomic conditions in Amador County. Therefore, the socioeconomic data for Amador County provides valuable information for the development of this report. Sources reviewed for this study included 1990 Census, the Amador County Assessor's Office for non-residential uses, other State and County agencies for data regarding schools, parks and the Mule Creek State Prison, and private entities for certain areas such as the ski resorts.

Table 1 summarizes the 1990 and 1996 population distribution by jurisdiction.

Table 1
AMADOR COUNTY POPULATION DATA

Location	1990 Census	1996 DOF Estimates	Percent Change/Yr
Amador City	196	210	1.16 %
Ione[1]	2,271	2,790	3.49 %
Jackson	3,545	3,880	1.52 %
Plymouth	811	830	0.39 %
Sutter Creek	1,835	2,060	1.95 %
Unincorporated Area	17,136	19,800	2.44 %
Amador County (Total)	25,794	29,570	2.30 %

Notes: [1] Excludes Mule Creek Prison population.

Previous state DOF estimates had ranked Amador as one of the fastest growing counties in the state. Historical census data indicates that between 1970 and 1980, Amador County's population increased by 63.4 percent. Between 1980 and 1990, population grew another 55.5 percent. However, the growth rate has slowed significantly since 1990, with only a 14.6 percent increase from 1990 to 1996. The following summarizes key socioeconomic data obtained from the 1990 census.

- Only 45.1 percent of all persons age 16 and over were in the work force. This is the lowest of any County in California as the statewide average is 67 percent.

- Only 35 percent of all people in Amador County were employed.

- The median income per household in Amador County was $30,265. This compares to a statewide average of $35,798.

- Amador County's rate of unemployment was 5.7 percent in 1990, which is slightly lower than the statewide average of 6.6 percent.

- Approximately 34 percent of the County's population was 60 years or older.

- The average number of persons per household was 2.48.

This population increase, together with tourism and recreational traffic, has generated increasing traffic concerns on State Routes and many County and City roads . This fact was documented by the *Four County Recreational Transit Demand and Feasibility Study* , which reports that 33 percent of total daily traffic is made up of recreational visitors and tourists on busy weekends and during the summer vacation season. The *Valley to Foothill Intermodal Subarea Study,* which documented the expected congestion associated with increased interregional travel between the Central Valley and the Sierra Foothills, specifically noted the problems on State Route 88 near the San Joaquin County line, as well as up-country.

Many Cities, including Jackson, Plymouth and Ione, have experienced significant increases in through traffic during the past several years. The Cities of Sutter Creek, Amador City, and the community of Drytown are also suffering the impacts of rapid growth and increased through-county traffic. These historic communities were established along what is now State Route 49 during the Gold Rush period. The widening of State Route 49 to handle increased traffic volumes would be impossible without ruining historic values and commercial

establishments. This is the reason that the State Route 49 Bypass of these communities is the highest state highway improvement priority of Amador County.

Travel Characteristics

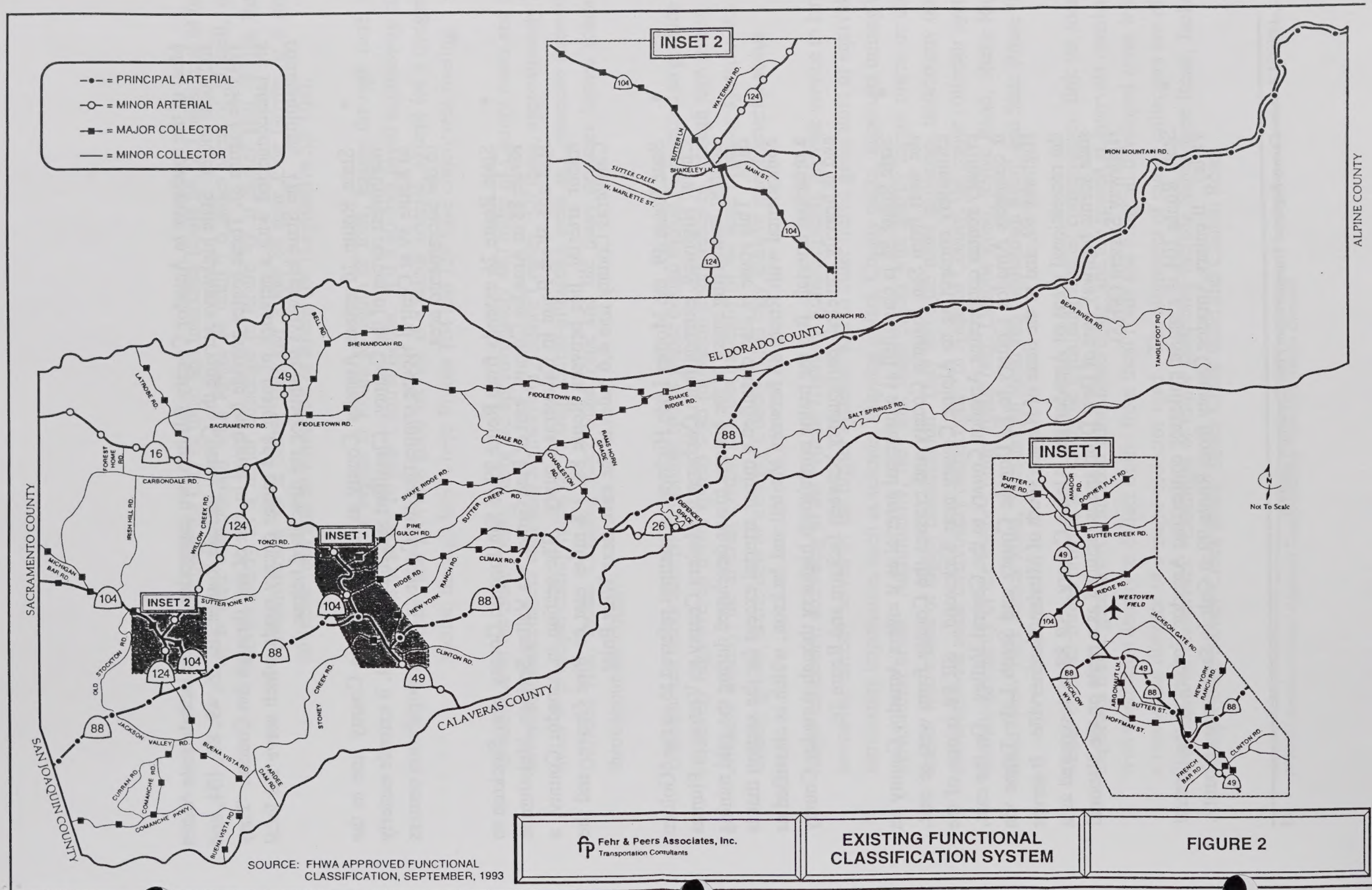
The following summarizes key conclusions that are drawn from the work-travel characteristic information obtained from the 1990 census data.

- Nearly 9 of 10 people in the County traveled to work by automobile.
- Five percent of all work trips were made by walking, while another 5 percent work at home. These percentages are high in comparison statewide averages of nearly 3 percent.
- Only 0.5 percent of all work trips were made using public transit. The statewide average is 4 percent.
- Approximately 60 percent of all work trips were less than 25 minutes. The mean travel time for all County work trips was 24 minutes.
- Nearly 90 percent of all work trips were made by single-occupant vehicles.
- Of all residents in the work force, 76 percent worked in Amador County.

The growth in Amador County's population and through-county traffic over the past decade has resulted in a number of deficiencies on the current transportation system. If population and regional travel demand continue to grow as projected, existing deficiencies will worsen and new deficiencies will occur. Therefore, the remaining discussion in this chapter focuses on the extent of these deficiencies for each transportation mode.

Roadway System

Figure 2 displays the major roadways in Amador County along with their functional classification as approved by the Federal Highway Administration in September, 1993. It should be noted that the Federal functional classification differs from the County's functional classification used for the construction of local road improvements.



SOURCE: FHWA APPROVED FUNCTIONAL CLASSIFICATION, SEPTEMBER, 1993

Fehr & Peers Associates, Inc.
Transportation Consultants

EXISTING FUNCTIONAL CLASSIFICATION SYSTEM

FIGURE 2

Most of the roadways in Amador County fall into two categories, which include state routes and local routes. State highways serving the County include Routes 16, 26, 49, 88, 104, and 124 (See Figure 2). These routes provide for travel in, out of and through the County. They are interconnected with a network of major and minor county roads which serve the local communities. The State highways in Amador are described below.

- State Route 16 enters Amador County at the Sacramento County line in the northwest corner of the County. Classified as a minor arterial, it extends easterly to Route 49 at Central House connecting the County's major population centers to the Sacramento area.

- State Route 26 extends from Route 99 in San Joaquin County near Stockton to Route 88 in Amador County, east of Pine Grove, via Valley Springs, Mokelumne Hill and West Point in Calaveras County. The section in Amador County, a minor arterial, lies between Route 88, 3.8 miles east of Pine Grove, and the Calaveras County line 4.6 miles to the east, near West Point.

- State Route 49, the Mother Lode Highway, sometmes referred to as the "Golden Chain" Highway, extends from Oakhurst in Madera County to Vinton in Plumas County, connecting many of the historic towns developed during the gold mining days. This route is also classified a minor arterial except for the section that is coincidental with Route 88 between Martell and Jackson, which is classified as a principal arterial. It is the major north/south highway though Amador County and is heavily traveled, particularly between Jackson and Route 16.

- State Route 88 is classified as a principal arterial as it enters Amador County on the west from San Joaquin County and crosses the County from west to east, ultimately connecting to Alpine County near Kirkwood. SR 88 is one of the primary routes connecting Amador County to the Central Valley. On the east, it connects Amador County to El Dorado County and South Lake Tahoe via Highway 89, and to the State of Nevada south of Minden/Gardnerville. It serves the recreational areas of Amador and Alpine County. SR 88 is designated as a state scenic highway east of Dew Drop and is included as a route on the National Highway System (NHS).

- State Route 104 is a major collector connecting Amador County to the Central Valley. It enters Amador County from Route 99 at Galt in Sacramento County,

passes through the City of Ione, and intersects Route 88, 2.3 miles east of Ione. It is then coincidental with Route 88 until 1.6 miles west of Martell, goes northeasterly as a major collector to Route 49 at Sutter Hill. Ridge Road, between Route 49 at Sutter Hill and Route 88 near Pine Grove, is a major collector road and an extension of Route 104 (Legislative SR 104).

- State Route 124 begins at Route 88 south of Ione, passes through Ione, and connects to Route 16 near Central House. It is a 40-foot paved expressway north of Ione, and provides good service as a minor arterial, except for a congested section through Ione where Routes 104 and 124 have concurrent routing.

In addition to the State routes, there are approximately 440 miles of County roads and city streets that interconnect with state highways in Amador County. Of these, approximately 125 miles of principal county roads serve such tourist-attracting areas as Comanche Reservoir, Daffodil Hill, Indian Grinding Rock State Park and the many summer homes scattered throughout the county.

Principal and minor arterials constitute routes whose design should be expected to provide for relatively high overall travel speeds with minimum interference to through movement. In Amador County, the arterial system consists basically of the state highway system. As the County grows, some new or existing County roads may achieve minor arterial status.

Major collectors, according to the Federal Highway Administration, provide service to larger towns not directly served by the higher systems, and to other traffic generators of equivalent intracounty importance, such as schools, shipping points, County parks, important mining and agricultural areas. Additionally, they link these places with nearby larger towns or cities and/or with routes of higher classification. They serve the more important intracounty travel corridors with some intercounty connections. In Amador County, the major collector system consists primarily of the major County roads (e.g. Latrobe Road, Ridge Road, Shake Ridge Road, New York Ranch Road, Shenandoah Road and Fiddletown Road) and State Route 104.

Minor collector routes provide service to the remaining smaller communities, link the locally important traffic generators with their rural hinterlands, and are spaced at intervals consistent with population density to collect traffic from local roads and bring all developed areas within a reasonable distance of a major collector road. The alignment of minor collectors are often dependant on the terrain. Examples of minor collectors include Sutter-Ione Road, Jackson Valley Road, Stoney Creek Road, Sutter Creek Road and Clinton Road.

The rural local road system serves primarily to provide access to adjacent land, and provides travel over relatively short distances as compared to collectors and other classifications. Local roads constitute the remaining roadway mileage not classified as principal arterials, minor arterials, or collector roadways. Roadways classified as rural minor collectors and local roads are not eligible for Surface Transportation Program (STP) federal funds under the requirements of the Intermodal Surface Transportation Efficiency Act (ISTEA).

Roadway Characteristics

Field surveys were performed to document the general condition of the major roadways in Amador County. The primary use of roadway characteristic data for this effort was to determine the effect of non-standard conditions on a road's capacity and ultimately its level of service. Key data factors included lane widths, shoulder widths, general terrain, percentage of the route in which passing is not allowed and pavement condition.

For the purposes of this analysis, each roadway was classified in to one of five categories as described below.

- *Class I* - includes 11' to 12' lanes, 4'+ shoulders, 0% - 40% no passing and level-rolling terrain.

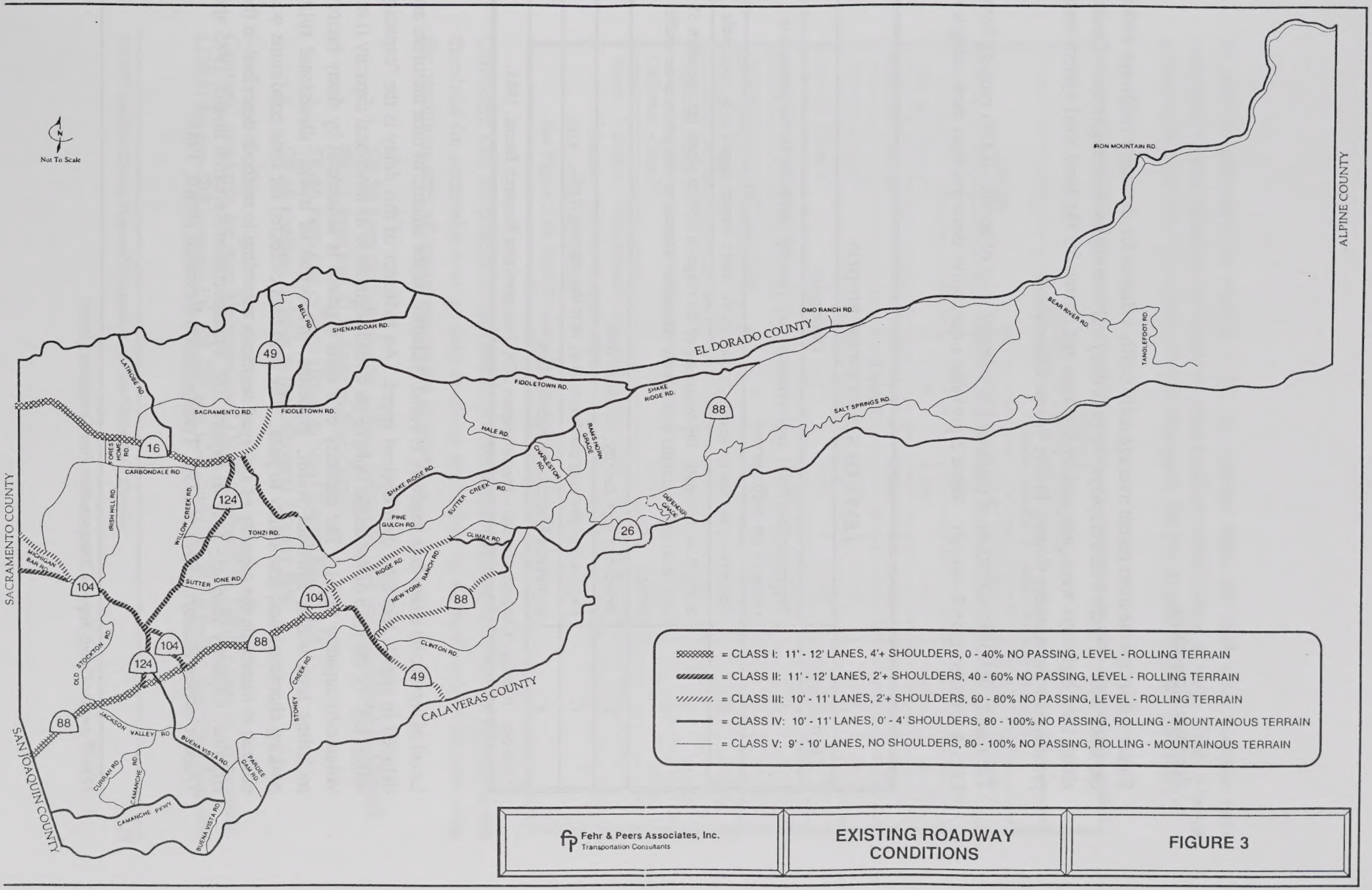
- *Class II* - includes 11' to 12' lanes, 2'+ shoulders, 40% - 60% no passing and level-rolling terrain.

- *Class III* - includes 10' to 11' lanes, 2'+ shoulders, 60% - 80% no passing and level-rolling terrain.

- *Class IV* - includes 10' to 11' lanes, 0-4' shoulders, 80% - 100% no passing and rolling-mountainous terrain.

- *Class V* - includes 9' to 10' lanes, no shoulders, 80% - 100% no passing and rolling-mountainous terrain.

Figure 3 displays the classification of each major road segment. As shown, many of the State routes and County roads have lane widths of less than 12 feet and limited shoulders, if any. The majority of road segments are considered to be rolling terrain, while the pavement conditions of most roads does not appear to significantly affect the road's capacity.



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EXISTING ROADWAY CONDITIONS

FIGURE 3

Roadway Operations

Figure 4 displays the most recent average daily traffic volumes for the major roadways within the study area. Figure 4 also displays the peak daily volumes on the state highways. Counts along state highways were provided by Caltrans and counts for the local road system were provided by the Amador County Public Works Department.

The quality of traffic operations is expressed in terms of level of service (LOS) ranging from LOS A (best) to LOS F (worst). Table 2 provides a qualitative description of each category.

Table 2
LEVEL OF SERVICE DESCRIPTION

Level of Service	Description
A	Represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.
B	Stable flow, but the presence of others in the traffic stream begins to be noticeable.
C	Stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interaction with others in the traffic stream.
D	Represents high density, but stable flow.
E	Represents operating conditions at or near the capacity level.
F	Represents forced or breakdown flow.

Source: *Highway Capacity Manual - Special Report 209*, Transportation Research Board, 1985.

Level of service on a two-lane roadway is based primarily on the amount of time motorists are delayed in speeds less than their desired speed. An indicator of this delay is the "capacity utilization" or the ratio of the traffic volume on a road segment to its functional capacity (i.e., volume-to-capacity ratio). The capacity of a road segment is influenced by many factors including lane width, shoulder width, gradeline, proportion of trucks, directional split, peaking characteristics, and ability to pass. The field data collected for road conditions was utilized to determine the capacity of key road segments according to methods described in the *Highway Capacity Manual - Special Report 209*, Transportation Research Board, 1985 and *Transportation Research Record 1194*, Transportation Research Board, 1988.

In order to determine the existing LOS, the average daily and peak daily volumes were compared to road capacities developed for each roadway classification of road. Table 3 below presents the daily level of service criteria developed for the Amador County roadways.

Table 3
LEVEL OF SERVICE CRITERIA

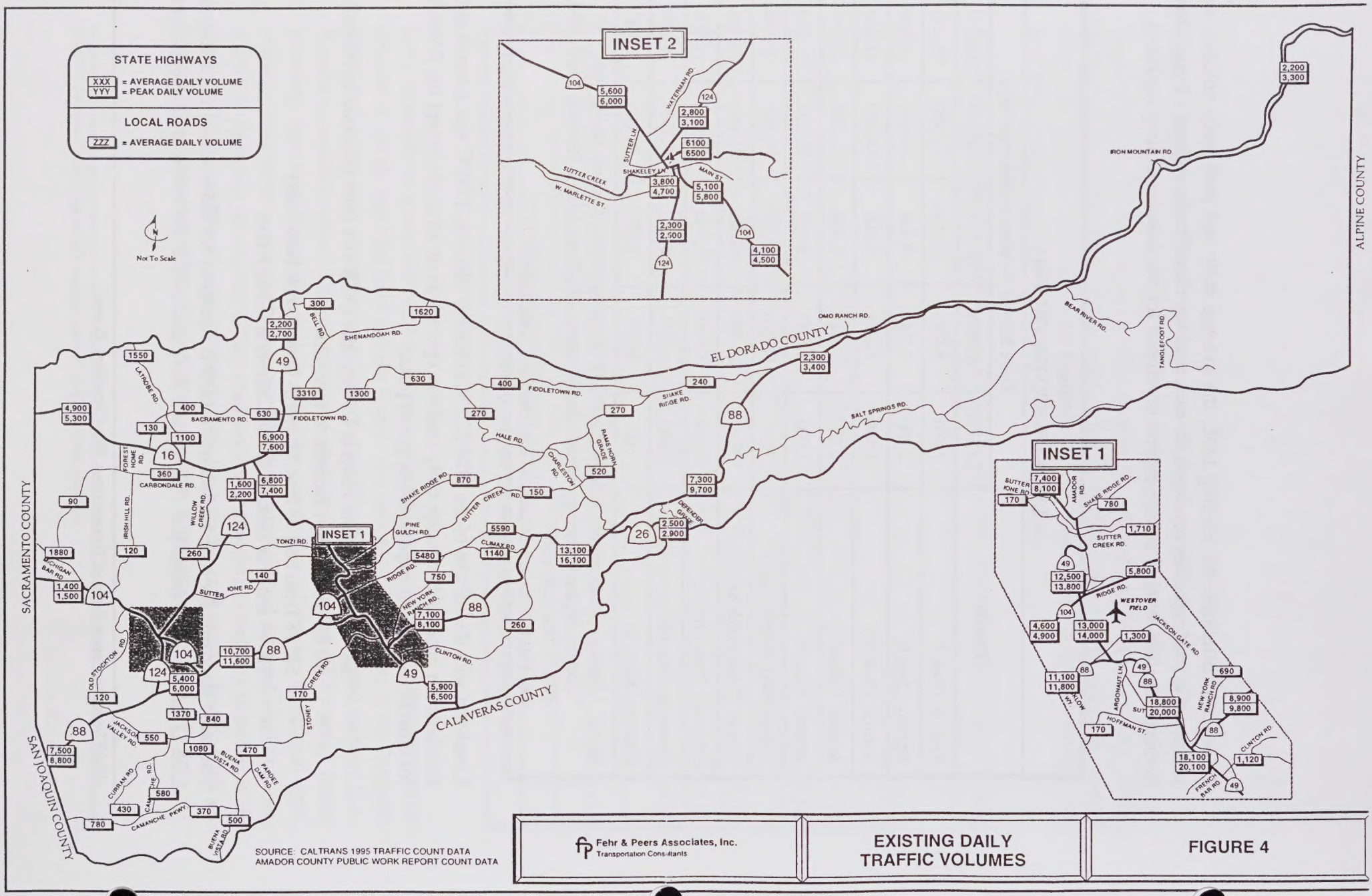
Facility	Daily Service Volumes (vehicles per day)				
	LOS A	LOS B	LOS C	LOS D	LOS E
Arterial, Class I[1]	2,600	5,900	10,300	16,900	20,200
Arterial, Class II[1]	2,200	5,200	9,300	15,300	18,900
Arterial, Class III[1]	1,600	4,500	8,600	14,200	18,600
Arterial, Class IV[1]	1,200	3,300	6,400	11,000	15,500
Arterial, Class V[1]	1,000	3,000	5,900	10,200	14,300
Arterial (with climbing lane)	N/A	12,200	16,500	22,200	25,100
Arterial (2 lanes each direction)[2]	N/A	24,900	30,800	32,700	34,900
Collector, Class I-III [1]	1,300	3,900	7,500	12,600	16,900
Collector, Class IV[1]	1,000	3,000	5,500	8,750	11,200
Collector, Class V[1]	600	2,000	3,500	4,900	5,500

Notes: [1] Source - *Transportation Research Record 1194*, Transportation Research Board, 1988.
[2] Source - *Highway Capacity Manual - Special Report 209*, Transportation Research Board, 1994.
N/A = Not Achievable.
See Figure 3 for identification of road condition classifications.

Consistent with the policies of the 1994 RTP/Circulation Element, LOS C was selected as the threshold for acceptable average daily roadway operations on all roads except the following for conditions after all improvements are in place:

- SR 88 from the San Joaquin County line to SR 104 (east junction) in Martell;
- SR 88 from east of Jackson to Pine Grove;
- SR 88 from east of Pine Grove to Omo Ranch Road; and
- SR 49 south of Jackson to the Calaveras County line.

Caltrans' standards for state highways are LOS C (desired) for IRRS routes in rural areas, LOS D for non-IRRS routes (i.e., SR 104 and 124), and LOS D for routes in developed areas.



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EXISTING DAILY TRAFFIC VOLUMES

FIGURE 4

Figure 5 presents the existing average and peak daily LOS results for the roadway segments. As shown, most of the problems exist on the State Routes in the urbanized areas of Jackson, Pine Grove and Sutter Creek. The following characteristics are common to these locations:

- Located in developed areas;
- Traffic stream includes a combination of local and regional (through) traffic;
- Roadway constraints such as narrow lanes, non-standard road alignment, limited shoulders, etc.;
- Frequent local access via driveways and intersections of collector roads; and,
- A high level of pedestrian activity.

The following locations currently experience unacceptable average daily levels of service according to the current LOS policy criteria.

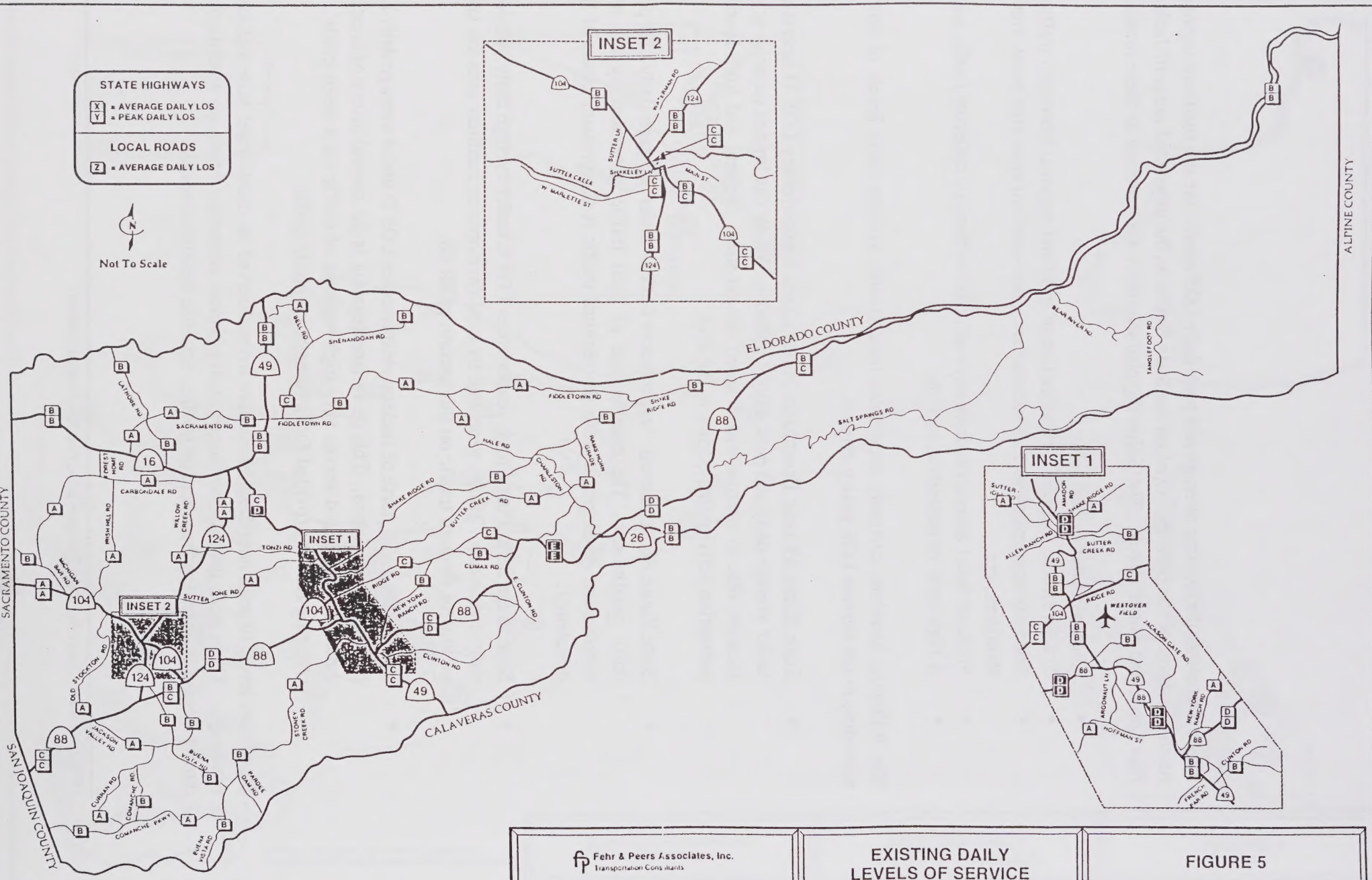
- State Route 49 near Downtown Sutter Creek - experiences LOS D operations under average daily and peak daily conditions. SR 49 has limited capacity at this location due to narrow travel lanes, the on-street parking and high level of pedestrian activity that occurs in the area.

- State Route 88 in Martell - experiences LOS D under average daily and peak daily conditions. The combination of local traffic generated by the area commercial development with the regional traffic is the primary cause of this deficiency.

- State Route 88 in Pine Grove - experiences LOS E under average daily and peak daily conditions. Traffic generated by local development conflicts with the large volume of through traffic on this section of SR 88.

- State Route 49/88 north of Jackson - experiences LOS D under average daily and peak daily conditions. This three-lane segment is the central artery of western Amador County and serves very high volumes of traffic on a steep grade. A climbing lane is provided for northbound (uphill) traffic.

Significant levels of peak hour congestion have been observed on many other state and local roadways. These peak periods may occur during typical commuter hours on weekdays or during weekends resulting from tourist traffic. Specific locations include:



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EXISTING DAILY LEVELS OF SERVICE

FIGURE 5

- Several intersections along State Route 49 in Jackson including Hoffman Street, Main Street, SR 88, Broadway Road and Clinton Road;

- Several intersections along State Route 49 in Martell including Argonaut Lane, SR 88, Jackson Gate Road and Ridge Road;

- Several intersections along State Route 49 in Sutter Creek including Spanish Street, Church Street, Eureka Street and Gopher Flat Road;

- Sections of State Route 49 through Plymouth, Amador City and Drytown;

- Intersections of State Routes 104 and 124 in downtown Ione; and

- Sections of State Route 88 throughout the entire County, particularly in Pioneer and Buckhorn and in the Jackson Valley area south of Ione.

Public Transit

Public transit service in Amador County is provided by a number of public agencies and one private company in Amador County. Agencies that provide transportation services to the general public, transportation disadvantaged, and transit dependent population, are listed below.

1. Amador Rapid Transit System (ARTS) is the only public transit service in the County.
2. Amador County Unified School District provides school bus service for students.
3. Pioneer Cab Company in Jackson is the only taxicab company.
4. Blue Mountain Transit is a private van service based in San Andreas that provides transit service to the ARC program in Sutter Hill.
5. Amulvan provides service to medical patients whose needs cannot be serviced within the County.
6. ARC provides service to the developmentally disabled.
7. New Beginnings provides services to people visiting the Mule Creek State Prison in Ione.

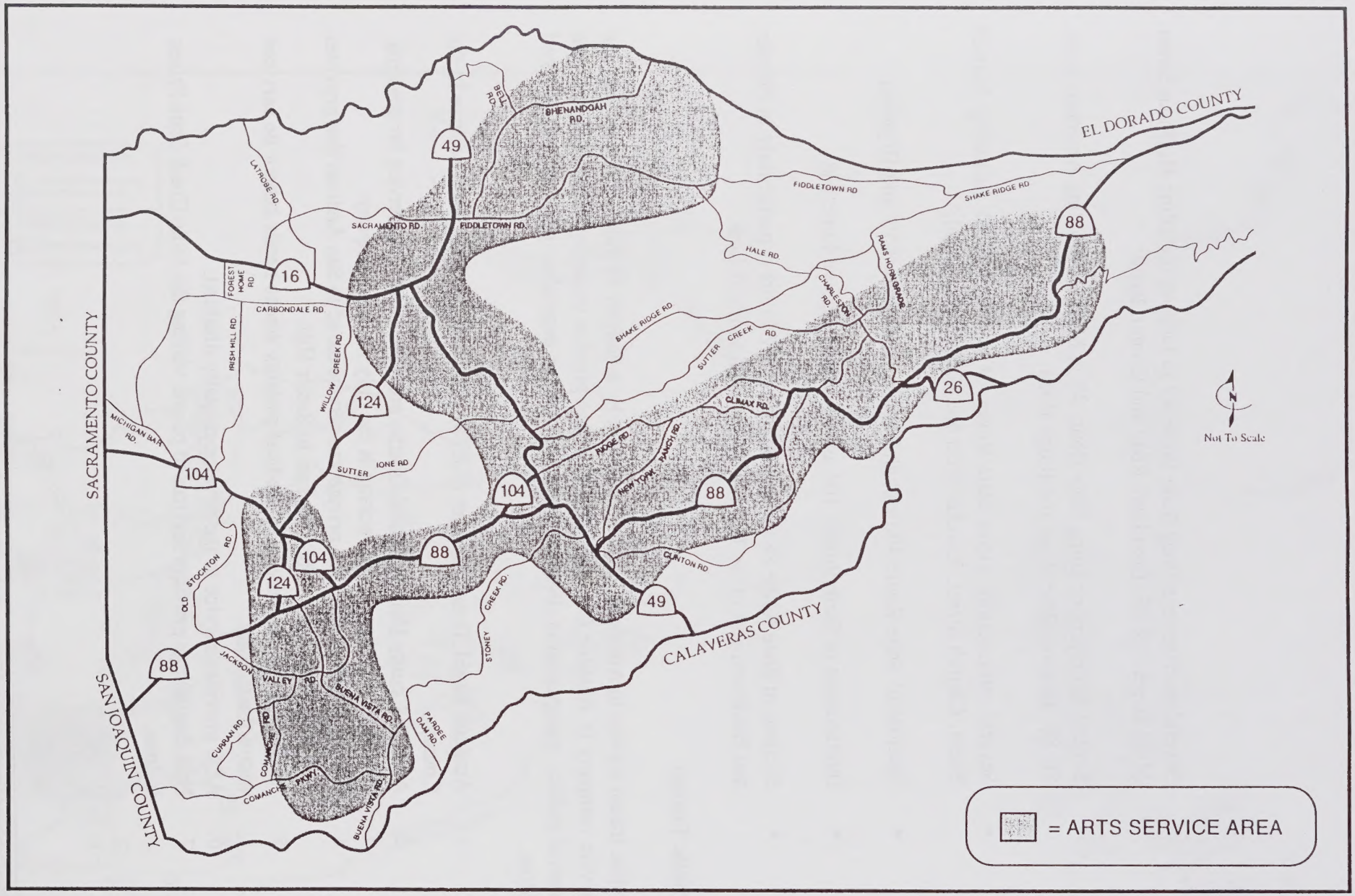


FIGURE 6	EXISTING TRANSIT SERVICE	Fehr & Peers Associates, Inc. Transportation Consultants

APRIL 8, 1997

The most extensive public transit service is provided by the Amador Rapid Transit System. ARTS provides fixed-route/demand responsive bus service throughout the western portion of the County. Service can extend up to one-half mile from the designated routes. As shown on Figure 6, the service area encompasses all five Cities and other small communities including Drytown, Fiddletown, Pine Grove, Pioneer and Buckhorn. ARTS serves the typical public transit patrons, as well as some school children because of recent reductions in school bus service and the initiation of fees to ride the school bus.

ARTS provides service Monday through Friday from 6:00 a.m. to 7:00 p.m. on seven routes. Saturday service is also provided between 9:30 a.m. to 4:00 p.m. on selected routes. The general fare (including students) is $1.00 per person, while seniors and handicapped passengers ride for $0.50. A book of 40 tickets can be purchased for $34.00 (15 percent discount). Seniors and handicapped can buy a monthly pass for $17.00. In the 1995/96 fiscal year, farebox revenue covered 21.9 percent of the total operating costs for the system. Table 4 shows Amador Rapid Transit System's current system and its performance indicators.

Table 4
ARTS PERFORMANCE INDICATORS

Indicator	1991/92	1992/93	1993/94	1994/95	1995/96
Total Passengers	89,572	89,654	83,916	108,644	119,000
Total Revenue	$88,469	$82,931	$64,324	$94,696	$100,000
Total Operating Cost	$362,200	$405,467	$400,908	$470,449	$500,000
Vehicle Service Miles	243,893	235,815	225,329	244,995	250,000
Vehicle Service Hours	10,822	10,386	10,423	11,279	11,800
$/Passenger	$4.04	$4.52	$4.78	$4.33	$4.20
$/Mile	$0.37	$0.38	$0.37	$0.44	$0.48
$/Hour	$33,47	$39.04	$38.46	$41.71	$42.37
Farebox Ratio	24.4%	22.1%	16.0%	20.1%	21.9%

Note: FY 1995/96 data is estimated. All other data is actual.
Source: *1996/1997 Amador County Transit Development Plan,* Nelson/Nygaard Consulting Associates, February 1996.

Table 4 shows a system with fairly constant ridership and costs between 1991 and 1993. However, in 1994/95, ridership increased substantially because of a large increase in school children riding the bus. That year, the Amador County Unified School District began a policy of charging for the costs of school bus service. As a result, many parents utilized the ARTS services instead of the less convenient than school bus service. The increase began to tax ARTS's capabilities. In 1995/96, ARTS raised its rates to the amounts shown on the previous page. ARTS experienced a subsequent decline in ridership; however, in 1996/97, ridership is increasing.

Although the system only serves a small portion (0.5 percent) of work trips, ARTS does provide a valuable social service as a major portion of passengers are transportation disadvantaged. For example, approximately 81.8 percent of passengers rely solely on the service, and 40.5 percent are elderly or handicapped.

Unmet Needs

The unmet needs process is an integral part of transit planning in Amador County. The unmet needs process is required by state law to be carried out if Local Transportation Funds (LTF) funds, the primary source of transit funding in the County, are to be used for anything other than transit, pedestrian/bicycle facilities or transportation planning or administration purposes.

The ACTC conducts an unmet transit needs hearing in December or January each year. These hearings are well publicized and the public is encouraged to express needs for transit service that are not being accommodated by the existing transit system. The needs that are brought forth are given a test for "reasonableness". The ACTC has adopted and updates periodically specific "reasonable-to-meet" criteria based upon a number of factors including the cost to operate the ARTS service. All requests that meet the criteria are then fulfilled by expansion or extension of the ARTS service or other possible alternatives.

The current reasonableness criteria adopted in 1992 by the ACTC are costs of $5.00 per passenger and $38.00 per hour, service levels that assure a farebox return ratio of at least 10% and a "reasonable" ratio of passengers to distance traveled. When new service is requested, the amount of time involved to serve the route is multiplied by the $38.00 hourly rate. This total is then divided by the anticipated number of riders on the route. If the final figure is greater than $5.00, and/or the potential farebox return is less than 10%, the need is deemed unreasonable to meet.

Aviation Facilities

Westover Field, located near Martell, is the only public airport serving Amador County (see Figure 7). The airport is classified as a Basic Utility 1 airport with Fixed-Base Operator service. It is situated at an elevation of 1,694 feet above sea level and includes a runway of 3,400 feet in length and 60 feet in width. The airport accommodates both visual flight rule and instrument flight rule approach procedures.

According to the Federal Aviation Administration data, a total of 104 aircraft were based at the airport in 1997. This included 100 single engine aircraft and 4 multi-engine aircraft. In addition, 3 ultralight and 1 helicopter are also based at the airport. The estimated annual aircraft operations is 43,422. There is no commuter or airline reliever service to this airport at this time, and the previous air taxi and charter service has been discontinued. Current needs at the airport include improved ground transportation access, expanded automobile and aircraft parking, and other general improvements to existing facilities.

Bikeway and Pedestrian Facilities

Few designated bicycle routes currently exist in Amador County and a very small percentage of the local population is using their bicycles in lieu of autos for shorter distance transportation trips, probably less than 1%. This is largely because of the population's preference for automobiles, the County's widely disbursed pattern of urbanization, hilly terrain and traffic hazards. The popularity of bicycle touring by local and non-county residents, however, is growing. More and more cyclists are seen touring the historic Mother Lode and trans-Sierra crossings along SR 88 are also common. To provide adequate space for both the motorist and the cyclists, recent Caltrans projects have included wide shoulders to better accommodate bicycle travel.

With increasing bicycle activity in Amador County and the lack of existing facilities, the County roadway system is unprepared to accommodate on-street bicycle travel. Bicyclists will be forced to share the existing roadway. This is not a desirable condition in Amador County given that many county roads and even state routes are very narrow and without shoulders to allow vehicles enough room to safely pass a slower moving bicycle. As a result, the ACTC is currently developing a comprehensive Bicycle and Pedestrian Master Plan for all of Amador County. An extensive inventory of existing facilities was completed in 1994. The project is expected to be completed as planning funds are available.

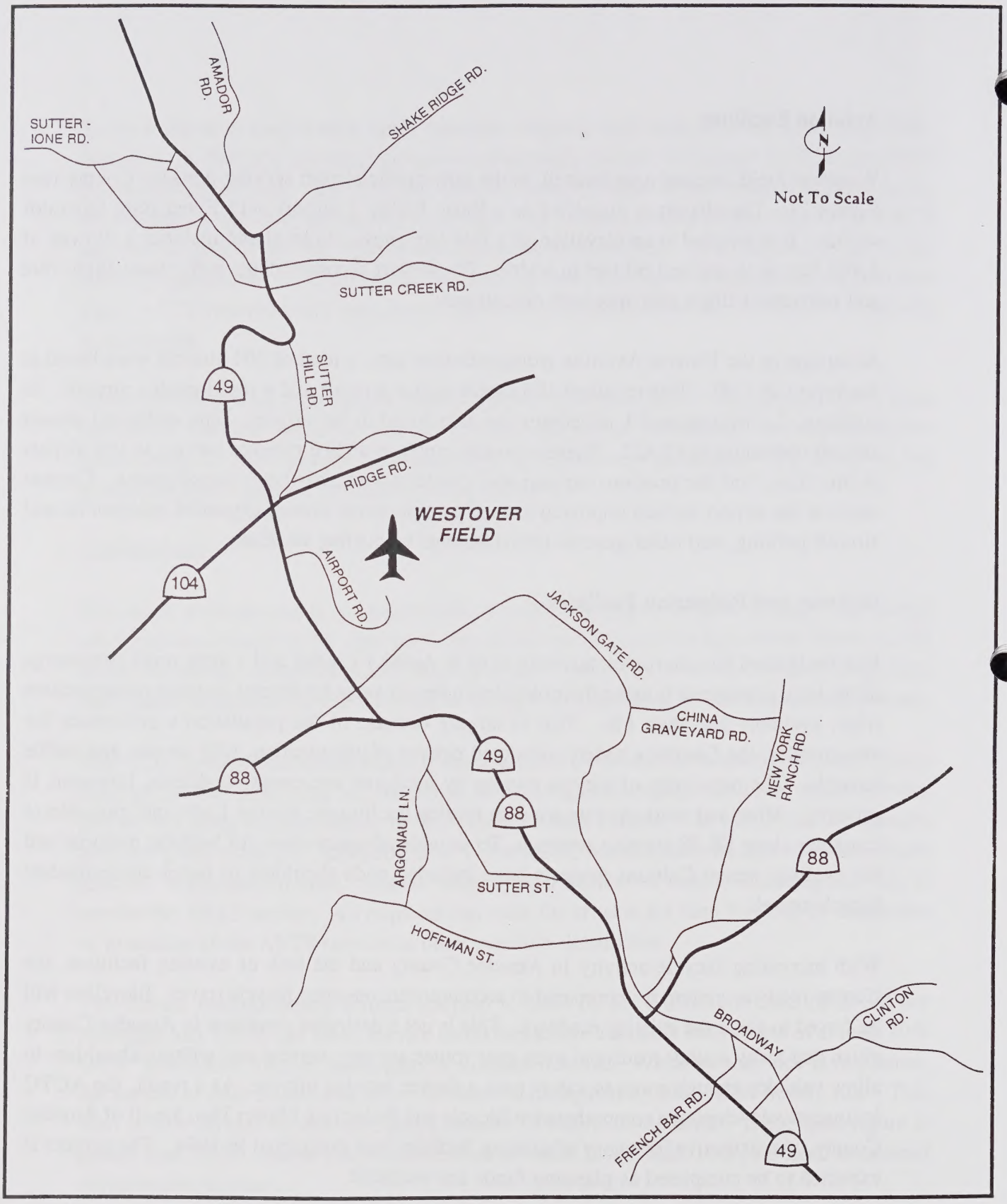


FIGURE 7	EXISTING AVIATION FACILITY	Fehr & Peers Associates, Inc. Transportation Consultants

In terms of pedestrian circulation issues, the primary deficiency relates to safe crossings of high-volume roadways, particularly State Routes. The Circulation Elements for Jackson and Plymouth specifically identify the need for controlled pedestrian access across State Route 49 through either future traffic signals or grade-separated facilities. Pedestrian-related safety improvements are also proposed by the Cities of Ione and Sutter Creek.

Rail and Goods Movement

Rail service in Amador County is limited to freight service since there is no direct rail passenger service available. Most County residents obtain rail passenger service in Stockton, Sacramento, Oakland, or San Francisco. Until recently, the Amador Central Railroad operated, on call, between Ione and Martell for rail freight service. In 1996, the mill was sold to Sierra Pacific Company, whose future plans for this rail line are unclear at this time.

With limited rail freight service in the County, trucks handle most of the freight entering and exiting Amador County. This statement is supported by the fact that 6-10 percent of the daily traffic on state routes consists of trucks according to Caltrans vehicle classification counts that determine the percentage of trucks in the traffic stream. Specific levels of truck traffic for each State route in Amador County are shown in Table 5.

Table 5 shows relatively high percentages of truck traffic on the State Routes in Amador County. North-south truck traffic is the most concentrated on SR 49 and SR 104/124 through downtown Ione, while east-west truck traffic is concentrated on SR 88, SR 16, and the short section of 104 that connects SR 88 to SR 49. It is interesting to note that SR 104 (Ridge Road) from SR 88 to SR 49 in Martell contains the highest percentage of trucks of all roads in the County. This is indicative of the fact that the SR 104/Ridge Road corridor is heavily used by trucks as an alternative route to SR 88 to access the eastern County, as well as the industrial developments in Martell.

With increased urban and commercial development in Amador County, large trucks, including double trailers, have been stopping to make deliveries on their routes through the areas. This problem has particularly critical in Ione, Amador City, Sutter Creek, Martell, Jackson and Pine Grove. The use of large trucks on local roads and parking lots adds to traffic congestion and increased road maintenance costs. There is a current need to establish specific truck routes throughout the County to help direct truck traffic to the most appropriate roadways.

Table 5 TRUCK TRAFFIC ON STATE ROUTES IN AMADOR COUNTY		
Route	Limits	Percentage Trucks
SR 16	Sacramento County Line to SR 49	6.5 %
SR 49	El Dorado County Line to SR 16	7.8 %
SR 49	SR 16 to SR 88 west	7.6 %
SR 49	SR 88 to Calaveras County Line	7.4 %
SR 88	San Joaquin County Line to SR 49 north	8.4 %
SR 88	SR 49 north to SR 49 south	7.7 %
SR 88	SR 49 to Pioneer	6.7 %
SR 88	Pioneer to Alpine County Line	7.6 %
SR 104	Sacramento County Line to SR 88 west	8.7 %
SR 104	SR 88 east to SR 49	9.9 %
SR 124	SR 88 to SR 104	6.5 %
SR 124	SR 104 to SR 16	6.0 %
Source: *1995 Annual Average Daily Truck Traffic on the California State Highway System*, Caltrans, October, 1996.		

Transportation Demand Management

Transportation Demand Management (TDM) is a term for the management of all modes of transportation to create a more efficient transportation system. "TDM" refers to techniques for managing traffic circulation better to make maximum usage of existing circulation facilities without having to construct expensive new facilities. Examples of TSM include the coordinated use of public and social service transportation, ridesharing (carpool/vanpools), bicycling, the use of flexible (staggered) work hours and variable work schedules by large employers, creation of adequate parking facilities, van pool commuter lanes, and the proper timing of traffic signals. TDM techniques are intended to provide an economical, short-term improvement to efficiency and congestion. They can also result in energy conservation and reduced air quality emissions.

Currently, TDM activities are limited in Amador County. ISTEA guidelines strongly support TDM actions to maximize the use of the existing transportation system. There is a need for Amador County to establish a formal program to implement TDM actions on an on-going basis.

Air Quality

Pollutant data collected at the Jackson monitoring station in November of 1992 indicates that ozone emissions exceed state standards. As a result, the California Air Resources Board (CARB) has designated Amador County as a non-attainment area for ozone emissions. However, the CARB recently determined that the severity of the non-attainment status was due overwhelmingly to pollutants transported from the Central Valley. Therefore, the County is not required to implement the conformity and trip reduction activities mandated by the State and Federal legislation.

Regardless of the status, increasing traffic congestion will translate into increased air emissions. Improvements to the transportation system should result in lower air emissions via reductions in congestion.

FUTURE NEEDS

Future transportation needs in Amador County were based on the expected level of travel demand in the future and the ability of existing facilities to accommodate the demand at acceptable levels. In order to project the future demand, the County-wide traffic model developed for the 1994 studies was updated based on revised growth assumptions for each jurisdiction with the County.

Table 6 summarizes the estimated population of each jurisdiction based on the growth projections for the 10-year periods from 1996 to 2006 from 2006 to 2016.

The 1994 RTP analysis was based on an assumption of approximately 3.1 percent per year average growth from 1994 to 2014, which is consistent with State Department of Finance (D.O.F.) projections. Based on these updated local projections, the average growth rate would be 2.6 percent per year from 1996 to 2016, which is somewhat lower than the D.O.F. rate, but more consistent with the growth rate experienced during the past six years. It should be noted that the D.O.F. growth rates are based on projections completed in 1993, and those have not yet been updated.

Table 6 POPULATION PROJECTIONS [1]			
Jurisdiction	1996 Population[2]	2006 Population	2016 Population
Amador City	210	270	350
Ione	2,790	4,070	5,340
Jackson	3,880	5,050	6,230
Plymouth	830	1,160	1,440
Sutter Creek	2,060	2,320	3,600
Unincorporated	19,800	26,190	32,580
Total	29,570	39,060	49,540

Notes: [1] Based on 2.4 persons per household. Does not include mental health institutions or prisons.
[2] Source: State Department of Finance Population Projections, Report 96 E-1.

The revised growth assumptions were added into the Amador County traffic model, along with other assumptions regarding non-residential growth and through travel, to generate the traffic forecasts. D.O.F. growth data for adjacent Counties was used to estimate the influence of regional traffic due to growth outside Amador County.

Since the focus of this analysis was to evaluate the future deficiencies under a worst case scenario (i.e., assuming no improvements to the roadway system), the existing roadway network contained in the base year (1990) traffic model was used for the 10-year, 20-year and buildout analysis without modification.

Roadway System

Future conditions were analyzed for a 10-year planning horizon (2006) and a 20-year planning horizon (2016). The following section describes the results of the traffic forecasts and identifies the deficiencies that need to be improved.

Figure 8 displays the average daily and peak daily forecasts for area roadways by 2006, while Figure 9 displays similar data for 2016. As expected, volumes increased on all roads, particularly the state highway system. The projected increase in growth in Calaveras County attracted a greater percentage of traffic to State Route 49. State routes that are currently deficient experience even heavier demands, particularly State Routes 49 and 88 throughout the entire County. The existing trend of mixing through traffic with local development traffic is expected to continue to worsen in the developing portions of the County such as Jackson, Sutter Creek, Martell, Pine Grove, Pioneer and Ione.

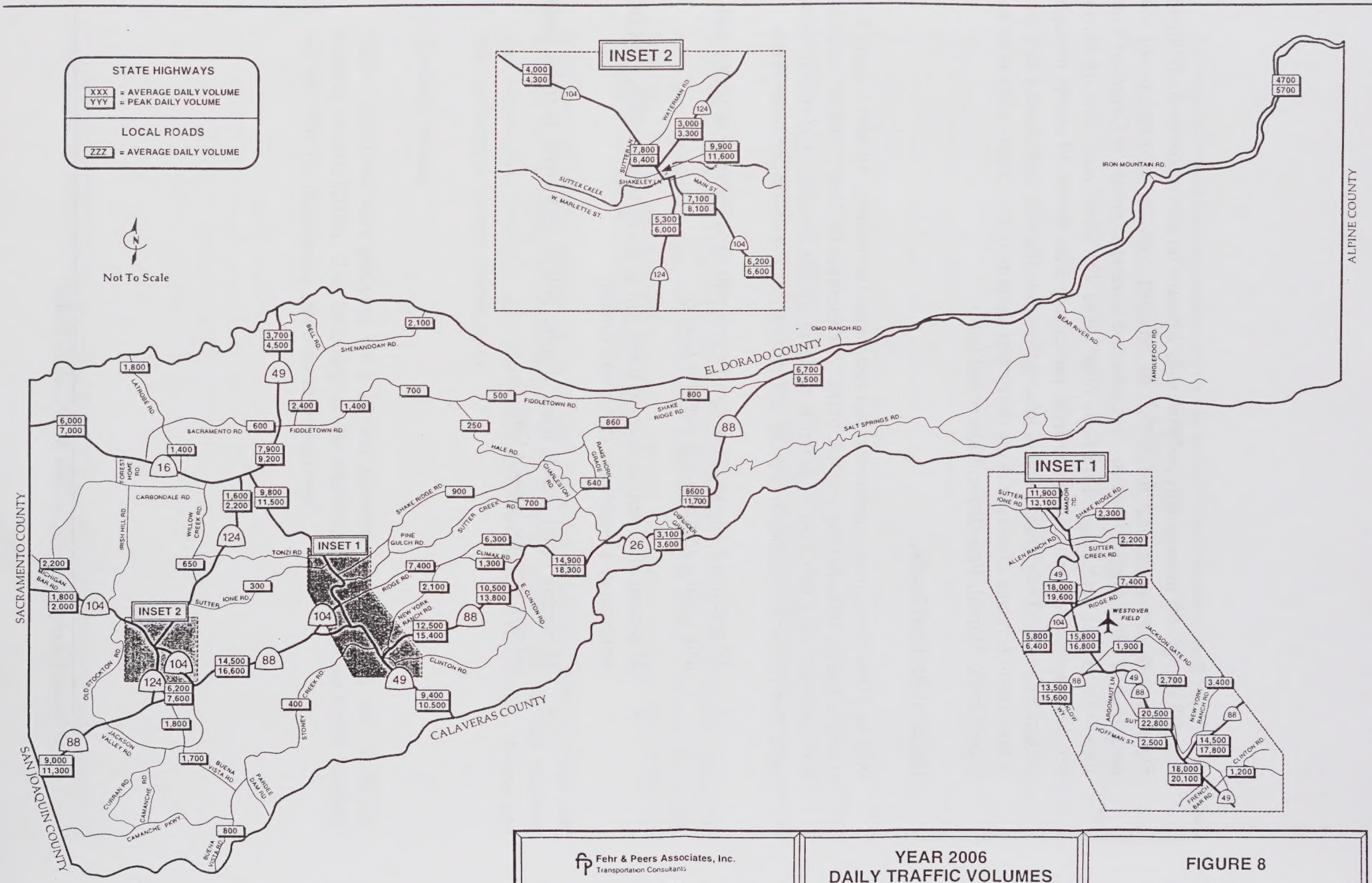
Impact of Regional Traffic

With its proximity to many commercial and recreational attractions, Amador County's road system is heavily influenced by regional traffic. To determine the level of impact, an analysis was conducted using the Countywide traffic model to estimate the amount of vehicle miles of travel that will be attributable to regional traffic in 2016. The results are listed below.

- 38 percent of all vehicle miles of travel will be attributable to traffic with an origin and a destination in Amador County.

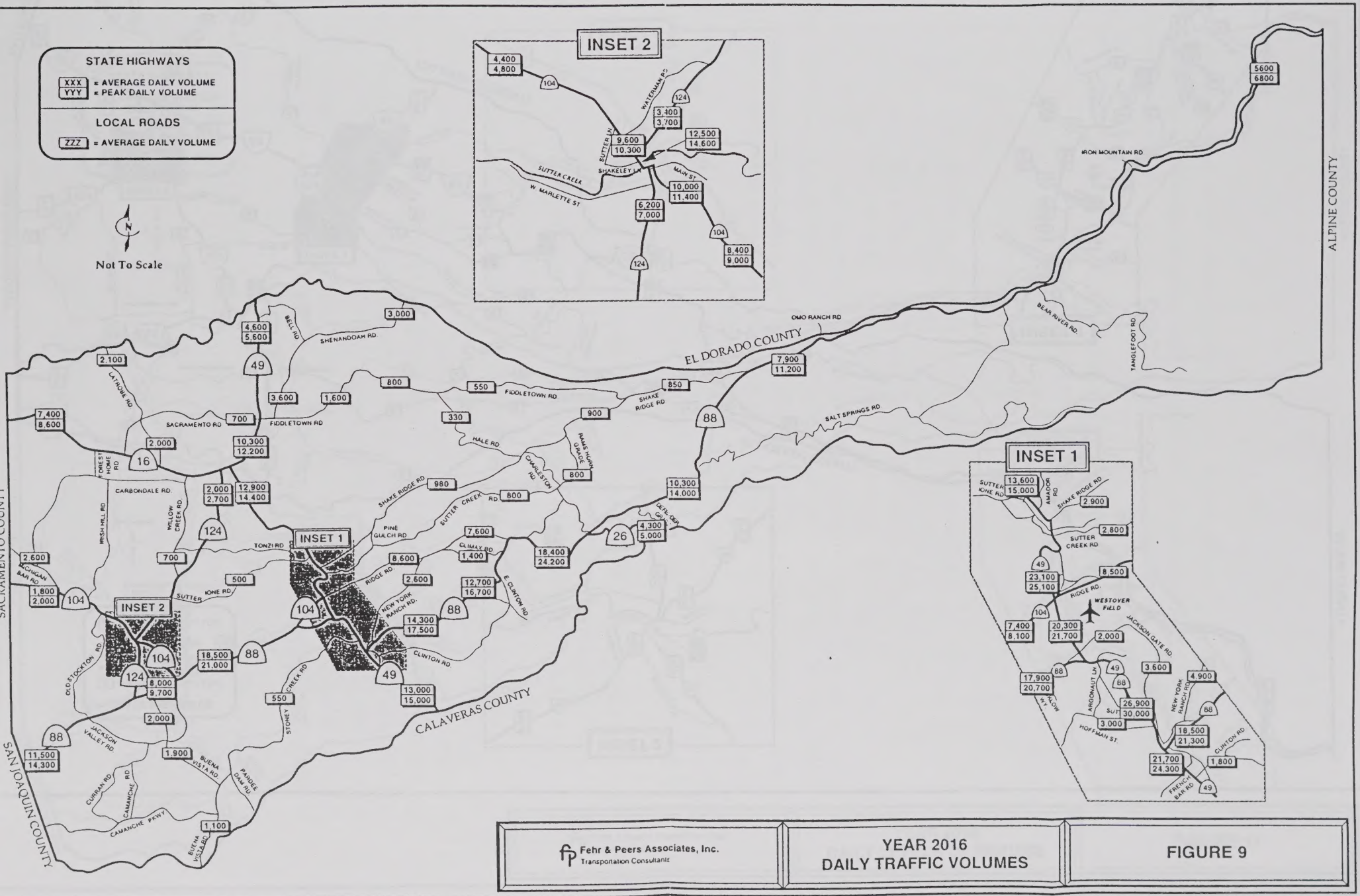
- 47 percent of all vehicle miles of travel will be attributable to traffic with either an origin or a destination in Amador County.

- 15 percent of all vehicle miles of travel will be attributable to traffic passing entirely through Amador County.



YEAR 2006
DAILY TRAFFIC VOLUMES

FIGURE 8



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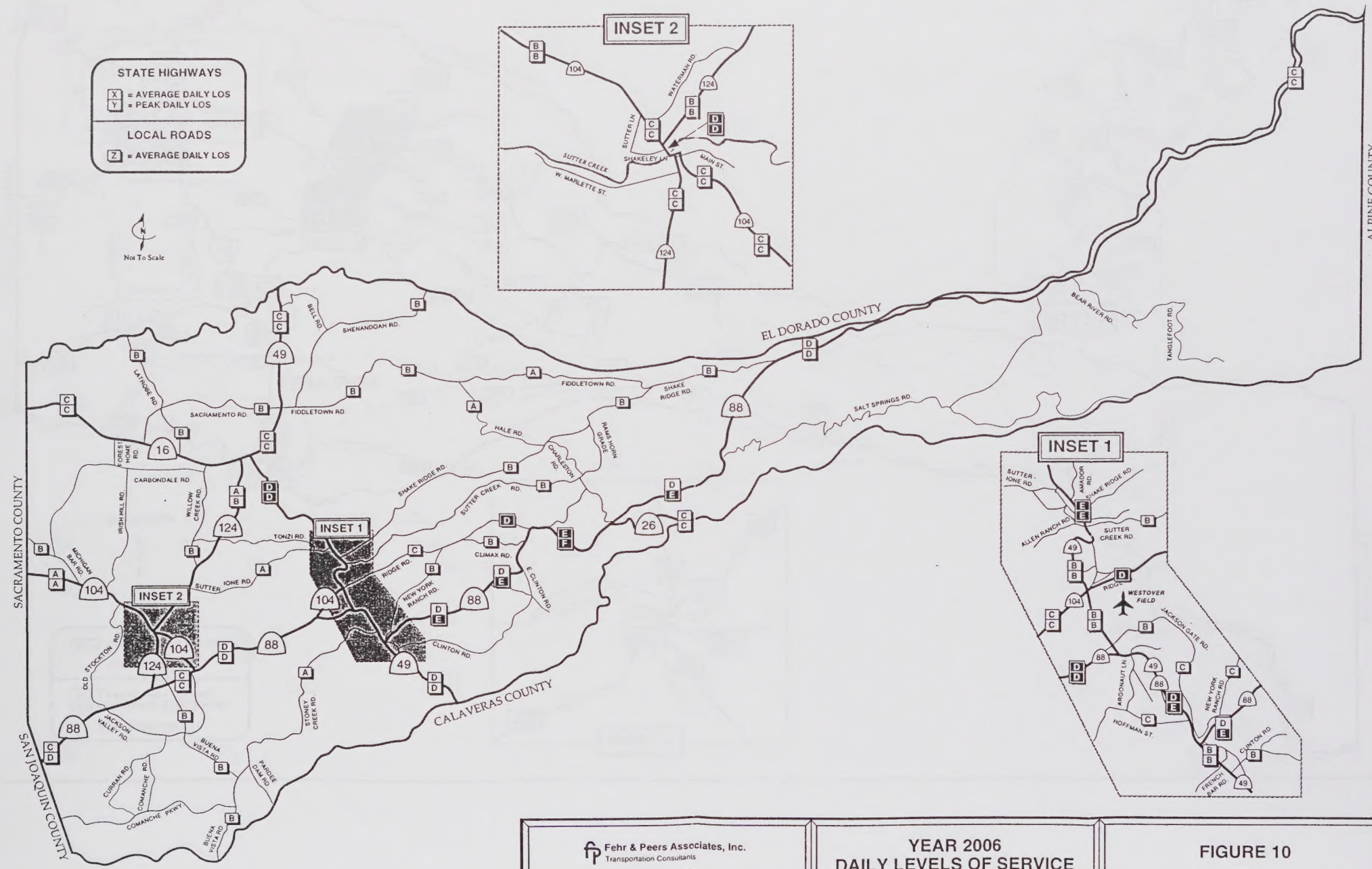
YEAR 2016
DAILY TRAFFIC VOLUMES

FIGURE 9



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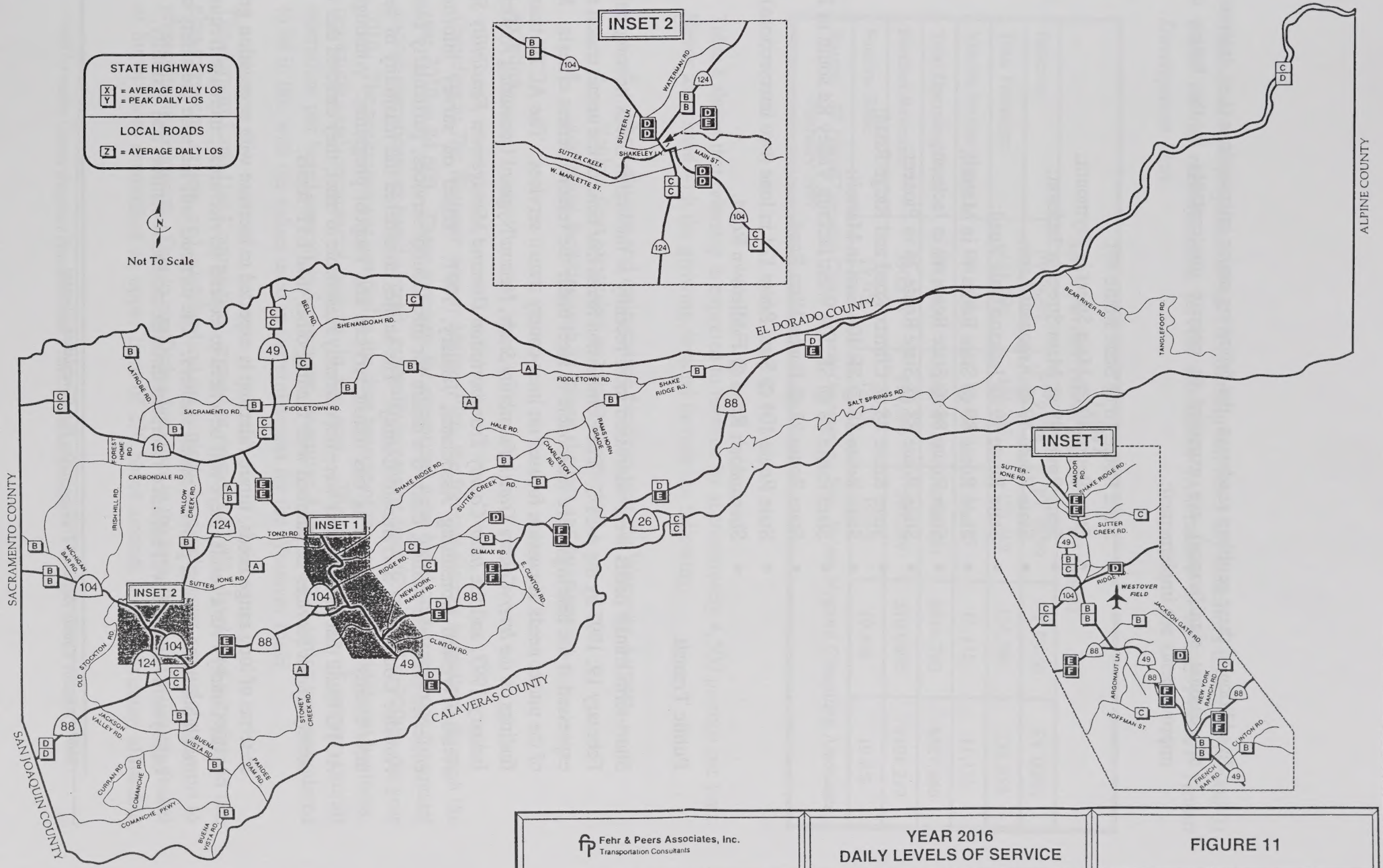
YEAR 2006
DAILY LEVELS OF SERVICE

FIGURE 10



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YEAR 2016
DAILY LEVELS OF SERVICE

FIGURE 11

In addition to these problem roadways, the following major intersections (i.e., intersections of regional significance) are expected to operate unacceptably in the future unless improvements are implemented:

- State Route 16 @ State Route 49;
- State Route 49 @ Main Street in Plymouth;
- State Route 49 @ Main Street in Jackson;
- State Route 49 @ Argonaut Lane;
- State Route 49 @ Jackson Gate Road;
- State Route 88 @ State Route 49 in Martell;
- State Route 88 @ State Route 49 in Jackson;
- State Route 88 @ State Route 26 in Pioneer;
- State Route 88 @ Climax Road and Ridge Road;
- State Route 88 @ SR 104 East in Martell;
- State Route 88 @ SR 104 West/Jackson Valley Rd south of Ione;
- State Route 88 @ Buena Vista Road;
- State Route 104 @ State Route 124 in Ione (two intersections); and
- Shenandoah Road @ Fiddletown Road.

Public Transit

Short-term transit needs were addressed most recently at the unmet needs hearing held on February 19, 1997 by the ACTC. The Commission found that none of the unmet transit needs expressed at the hearings were reasonable to meet under the reasonableness criteria. Much of the unmet needs discussion focused on inter-county transit services. The ACTC based its findings on the *Inter-County Transit Feasibility Study*, Nelson/Nygaard Consulting Associates, January 1997, and the *Inter-County Transportation Demand Management Feasibility Study*, Nelson/Nygaard Consulting Associates, January, 1997. Based on survey information collected for these studies, there is a desire for inter-county services, particularly between Amador County and Sacramento County. The studies considered the feasibility of several inter-county options including bus transit services and vanpool programs. Although the ACTC found that these options were not currently reasonable to meet, they directed that inter-county transit services be pursued with funding other than LTF funds.

In terms of long range needs, future ridership is expected to increase with population growth in the County. As a result, there will be a need to expand service areas, increase frequency, install bus turnouts, and provide transit shelters. The turnouts will increase the safety of the bus system. Shelters will enhance ridership through increased comfort and visibility.

Table 8 shows a projection of ARTS ridership and other key indicators through FY 2000/01 based on the recommended service alternative (Alternative 2) in the *1996/97 Transit Development Plan*.

Table 8
ARTS PROJECTIONS THROUGH FY 2000/01

Indicator	FY 96/97	FY 97/98	FY 98/99	FY 99/00	FY 00/01
Total Passengers	121,094	125,333	129,719	134,260	138,959
Vehicle Service Hours	11,115	11,115	11,115	11,115	11,115
Total Operating Costs	$478,034	$489,985	$502,234	$514,790	$527,660
Farebox Revenues	$90,821	$94,000	$97,289	$100,695	$104,219
Farebox Ratio	19.0%	19.2%	19.4%	19.6%	19.8%

Source: *FY 1996/97 Amador County Transit Development Plan*, Nelson/Nygaard Consulting Associates, February 1997.

Table 8 shows that ridership is expected to increase by approximately 4,500 patrons per year. Needs associated with the growing demand include the following:

- New storage and maintenance facilities near the Westover Airport;
- Vehicle fleet expansion and replacement; and
- Additional facilities such as transit shelters and bus turnouts.

Aviation

According to *The Westover Airport Master Plan*, the forecast aircraft operations through the year 2010 is 84,600. These forecasts for operations were based on assumptions for annual aircraft operations per based aircraft, gradually increasing from 92 in 1987 to 300 by the year 2010. The projection was justified at the time because of the anticipated additional business, recreation, and commercial activity in the area. The 1990 number of annual aircraft operations per based aircraft at Sacramento Executive Airport is 275 which was considered to be in line with the values used in the projections for the Westover Field.

The Airport Land Use Commission, created in August of 1986, developed a draft land use plan to govern, review, and establish land use controls for development around the airport to protect its future growth. Due to conflicting land uses in the area, the Amador County Board of Supervisors established an upper limit of 230 based aircraft as the maximum allowable

growth for this airport in 1987. This upper limit was established largely because of noise and other environmental concerns.

At that time, the Board of Supervisors began a search for an alternate site. The search concluded that the present location was the best location for the airport. This substantiated the findings of the previous studies in 1987 prior to the expansion. In 1990, the Airport Land Use Commission adopted the current Airport Land Use Plan. This plan calls for a maximum of 233 based aircraft and establishes policies and criteria for land use to protect Westover Field from conflicting and/or hazardous uses. The 1991 *Westover Airport Master Plan* details how the existing facility will be upgraded and expanded to that limit, which is expected to meet County needs for the next 20 to 30 years. Federal funding has been obtained to carry out improvements and expansion of the existing site as recommended in prior RTPs.

Another important need is improved vehicle access to and from the facility. Access is currently constrained by the single entry at SR 49 just south of the Ridge Road intersection. Additional access is needed to serve the increased demand projected for the facility.

Bikeway and Pedestrian Facilities

A substantial amount of commuter and recreational bicycling is anticipated to occur along many roadways in the County, many of which are not designed to provide safe access. Census data also indicates that approximately 5 percent of home-to-work travel occurs by walking. With traffic volumes expected to increase in most locations, it is important that the Bicycle and Trail Master Plan include designation of a comprehensive system to serve the County, with the inclusion of as many off-street trails as possible in order to minimize the conflicts with automobile traffic. New roads should also be constructed to accommodate bicyclists and pedestrians.

Rail and Goods Movement

Trucks are expected to be the most commonly used mode for transporting freight in Amador County over the next 20 years. Although goods movement by truck is more expensive than other modes (such as rail), it is quicker and more flexible. With expected increases in truck traffic, cooperative efforts are needed between the trucking industry, Amador County, and Caltrans to assess the impacts that trucks have on the roadway network and to create regulatory guidelines for truck travel in the County such as specific truck routes. Without improvements, the current impacts of truck traffic on communities such as Amador City, Sutter Creek, Ione, and Jackson, will increase exponentially.

The *Amador County Rail Transit Study,* February, 1993, reviewed two light rail transit (LRT) alternatives for operations along the existing rail corridor between Sacramento and Martell. Alternative 1 included LRT service sharing the same track as railroad operations with an estimated capital cost of $105.5 million. Alternative 2 would provide similar service along a separate track constructed within the existing rail right-of-way. The estimated capital cost of Alternative 2 was $139.3 million. Ridership projections for the proposed route in 2010 were estimated at 380 one-way trips per day. Based on the forecast ridership, it does not appear there is a need for passenger rail transit between the population centers in western Amador County and Sacramento within the 2010 planning period. Ridership forecasts are sufficient to support some type of bus service, which may be needed between these two areas in the future. The County considers rail transit to be a viable transportation mode in the long term (i.e., after 2010).

Transportation Demand Management

In the past, there has been little apparent need for TDM strategies in Amador County, but as urban-type development increases and resources to upgrade the County's circulation system remain limited, local need for TDM techniques will increase. A survey was conducted in 1996 to evaluate the short-range demand for TDM as a part of the *Inter-County Transportation Demand Management Feasibility Study*, Nelson/Nygaard Consulting Associates, January, 1997. The survey focused on the potential viability of vanpool services, particularly for commuters from Amador County to Sacramento or Stockton. The study concluded that there is a short-term need for a vanpool program to serve the Amador County/Sacramento commuter market. Service for the Amador County/Stockton commuter market was found to be a longer-term need.

Air Quality

Amador County is currently listed as non-attainment for ozone by the CARB, but with a special designation as overwhelmingly due to transported pollutants. This status is not expected to change dramatically in the future as regionwide vehicle miles of travel (VMT) and vehicle hours of travel (VHT) will increase along with population growth. Table 9 shows the expected level of increase in both statistics for Amador County.

Table 9 AMADOR COUNTY AIR QUALITY ANALYSIS WITHOUT IMPROVEMENTS					
Scenario	Regional VMT/Day	Regional VHT/Day	Avg. Speed (mph)	Ozone Precursor Emissions Rate (grams/mile)	Ozone Emissions (grams/day)
Existing Conditions (1990)	928,940	20,700	44.88	0.58	538,785
Future Conditions (2016) without improvements	1,750,760	39,500	44.32	0.58	1,015,440
Difference	+821,820	+18,800	- 0.56	-	+476,655
Source: Fehr & Peers Associates, 1997.					

As this information displays, regional VMT is expected to increase 88 percent and regional VHT is expected to increase 91 percent between 1990 and 2016 if no improvements are made to the transportation system. As a result, ozone emissions are projected to escalate 88 percent over the same time period. Improvements aimed at alleviating congestion and reducing travel demand will be necessary to reduce the delay and air emissions.

III. POLICY ELEMENT

The purpose of the Policy Element is to present direction and guidance for decision-makers regarding Amador County's transportation matters. The goals, objectives, and policies express the concerns and desires of the County and its member cities and give guidance in developing programs to address transportation needs. The Policy Element also presents regional input for consideration in the State's evaluation of significant transportation issues in the CTC's annual report.

POLICY ISSUES

In this section, state and regional transportation issues are identified. These are the unsettled problems or matters which determine the scope and priorities of this report. Needs and issues provide the framework for establishing goals, policies, and objectives.

Statewide Issues

In the 1988 RTP Update, the primary state level transportation issue was the lack of funding to carry out badly needed transportation improvements. SB 140 required that $1 billion in capacity enhancing projects be funded annually on the State Highway System. Statewide, voters turned down several ballot measures to increase transportation financing in June of 1988 and the State Legislature failed to create its own financing legislation. Reports projected statewide gridlock coupled with the lack of funds causing Caltrans officials to make comments such as "we may not be able to build ourselves out of this one" and "we may never have it as good as we do now".

In 1989, and with the general election of June, 1990, voter attitudes had changed. With the record showing that previous predictions of imminent gridlock were being realized, voters passed Propositions 108 and 111 implementing legislation called SCA 1 (Garamendi). Moneys appropriated from an additional 9 cents of state gasoline tax instituted over a four-year period were designated for specific programs aimed at improving the state highway system and implementing TSM, transit and rail traffic measures. Additionally, Proposition 116, providing $1.99 billion for transit, rail, and bicycle capital projects was passed.

In 1994, the state funding perspective had worsened significantly. A combination of failed voter-authorized rail bonds, a sluggish economy and the Northridge earthquake left the State

funding program $3-4 billion short of revenue needed to fund the current STIP. In order to adjust for this shortfall, the 1994 STIP reflected several adjustments made by the CTC to the scope and schedule of improvements projects previously included in the 1992 STIP.

In 1996/1997, the state funding outlook appears to have improved due in large part to the voter approval of seismic retrofit bonds in November of 1996. State highway account funds previously thought to be allocated for seismic retrofit projects may now be available for the 1998 STIP. Amador County is competing with other jurisdictions for Northern California's share of limited available highway transportation funds. Other jurisdictions include those in the San Francisco Bay Area and Sacramento where congestion and increasing occurrences of "gridlock" are affecting a much larger segment of the voting public.

Another statewide issue of concern to the County is the failure to complete programmed highway improvements on time. Project slippage, which has occurred because of unforeseen delays in obtaining right-of-way, completing environmental review, public controversy, contract problems, design changes and other factors, is causing increasing difficulties in obtaining project funding. Amador County has historically been considered a "surplus county" meaning it gets more than its fair share of the State transportation funds. This is largely because of the inability of the State to complete programmed SHOPP projects on time. However, since the 1994 STIP removed the SHOPP projects from the county minimum calculations, the issue of surplus programming is being redefined at the State level. In 1997, Amador County is still considered a surplus county. However, this is because of the full programming of the State Route 49 Bypass of Sutter Creek in the 1996 STIP.

Local and Regional Issues

Many transportation issues and concerns that affect the foothill counties were addressed in a detailed report titled, *Access and Transportation in the Foothills*, by Peter L. Hathaway for the Governor's Office of Planning and Research in January 12, 1981. Other local transportation issues have become apparent to travelers in the county and have been documented by studies recently contracted by the ACTC. Many of the important issues are either partially or completely beyond the County's control. The region's most serious transportation issues can be categorized as follows (not necessarily in priority order).

1. Unacceptable and deteriorating levels of service exist on State Route 49 in the cities of Jackson, Sutter Creek and Amador City causing the need for the proposed Route 49 bypass of these communities to be the most important planning issue in these cities and the first priority new highway projects of the County. In Sutter Creek, the

problem has reached such extreme levels that the City Council has denied certain development applications which further impact SR 49 until improvements can be constructed.

2. Increased traffic congestion is rapidly creating unacceptable levels of service on State highways in Jackson (SR 49), Ione (SR 104 and 124), Plymouth (SR 49), and on the State Route 88 corridor in the communities of Pioneer, Pine Grove and Buckhorn. Future development is anticipated to increase congestion not only on State highways, but on County roads and city streets. Better transportation systems management and new improvements will be needed to maintain acceptable circulation. State highway precise plans need to be adopted by cities and/or the County in developing areas adjacent to State highways.

3. There is a shortage of revenues to carry out an adequate maintenance program and needed roadway improvements for local roads and State highways, much of which is the result of impacts on the "system" created by local development and growth in through traffic including recreation and tourism.

4. The cities and County need to develop and maintain transportation plans adequate to meet projected needs. Traffic impact fees should be adopted to insure that new developments pay for the impacts their traffic will have on the overall circulation system, including the State Highway System. Proposed large and small private development projects being considered near existing state routes and local roads will have individual and cumulative adverse impacts on those streets and highways if not sufficiently mitigated through conditions of approval. These funding issues are especially important given the extreme lack of state funding available to fund programmed or proposed improvements.

5. Delays in constructing STIP & SHOPP programmed State highway projects should be minimized.

6. Additional passing opportunities are needed on state highways in Amador County in order to mitigate the effects of state/federal barrier striping (no passing) requirements and the continuing increase in traffic volumes.

7. There are many areas in the County in which existing and anticipated adequate traffic circulation for optimum fire protection and reduction of congestion is hindered by the lack of secondary accesses and long dead-end or cul-de-sac streets.

8. State routes and local road rights-of-way in many locations of the County are historic, unadjudicated prescriptive easements. These are not wide enough to meet established, minimum safety improvement criteria for streets and highways without acquisition of additional right-of-way width. In order to meet federal and state standards, State Routes 88, 49, 104, and 26 should have a minimum right-of-way of one hundred feet, with additional widths as necessary for cuts and fills, passing lanes or major intersections.

   In order to meet County improvement standards, minimum rights-of-way for the following classifications of roads should be: 1) Arterial, 80 feet; 2) Collector, 60 feet; and, 3) Local, 50 feet. Additional widths may be required for cuts and fills or major intersections.

9. Caltrans' policy requiring new developments to provide additional right-of-way and construct additional traffic lanes has negatively impacted expansion of existing and creation of new commercial developments in various areas of the County. In particular, concerns have arisen in cases where expansion of the State Highway System will impact historic buildings, existing businesses, and create adverse impacts to the environment.

10. Previously conducted studies in major County traffic corridors have indicated there is a need to identify, map and attempt to secure dedication of future arterial, collector or local road rights-of-way in order to provide an adequate overall traffic circulation network in Amador County. The cumulative effects of both individual large projects and numerous smaller projects will reduce the level of service of existing roads to unacceptable levels of congestion if new routes are not established and eventually constructed. Each project causes a varying degree of impact which must be evaluated and mitigated through the CEQA process.

11. The contract for ARTS service to AMCAL was in a state of uncertainty in the past due to lack of a long term contract with Valley Mountain Regional Center which provides service to the developmentally disabled in Amador County and without whose patronage ARTS's farebox ratio was seriously reduced. A multi-year contract is currently in effect. Steps must be taken to prevent a reoccurrence of previous years' uncertainty.

12. There is an inequity in the distribution of state highway funds to rural counties that attract large numbers of recreational motorists in addition to their County population. Formulas for allocating State highway account county minimums need to be adjusted to compensate for this inequity.

13. There is uncertainty regarding future state and federal funding for the public transit system(s) operating in the County.

14. The expansion of Westover Field, the Amador County Airport, may be threatened by encroaching, incompatible land uses. The Airport Land Use Commission must continue to protect the County's airport facility from incompatible uses.

15. Assurance of the continued availability of State or Federal aeronautics funds to support expansion of Westover Field, the County Airport, is an issue that needs constant attention.

16. Long-term rail service to the County is threatened and needs to be maintained.

17. Whereas public transit service is efficient and effective within the County, the lack of interregional public transit tends to isolate the County from nearby urbanized areas such as Stockton and Sacramento.

18. Additional State highway segments in Amador County need to be included in the IRRS (i.e., SR 104 and SR 124). This will require additional state legislation to accomplish.

19. Additional public road connections from local jurisdictions to the controlled access highways (SR 16, 104, and 124) need to be studied and an acceptable plan established.

20. Caltrans District 10 staff have commented that an "alternative worth discussion is the 'Unconstructed portion of State Highway Route 104 between Sutter Hill' (SR 49) and Pine Grove (SR 88)... Ridge Road and/or Climax Road would be a good candidate for adoption into the State highway system if upgrades were completed at the east end...since this county road is currently used by many motorists as a State Highway 88 through traffic alternate route bypassing the Jackson/Martell area." This continues to be an item of discussion.

21. Caltrans is currently conducting environmental studies for the SR 49 Bypass project. It is important that this work and the project development process proceed as quickly as possible to take advantage of future funding opportunities.

22. Conflicts between pedestrians and vehicles are of particular concern to the County, particularly along segments of State Highways in Amador City, Sutter Creek, Martell, Jackson, Ione, and Pine Grove. It is important to enhance the safety of these conflict areas and to provide pedestrian improvements (i.e., crosswalks) as a means to encourage non-automobile trips.

23. Given the growing levels of traffic congestion and the limited financial resources for improvements, the County should consider land use modifications as a means to mitigate transportation impacts.

24. State Route 104 in Ione appears to be used as an official and unofficial truck route. Large trucks have difficulty negotiating the right-angle turns on State Route 104 in downtown, which increases traffic congestion and vehicular conflicts.

GOALS, OBJECTIVES AND POLICIES

The goals, objectives, and policies in this document are intended to guide the development of a transportation system and improve the quality of life in Amador County.

The following statements are definitions of a goal, policy and an objective.

- A **goal** is the end toward which effort is directed; it is general and timeless.

- A **policy** is a direction statement that guides actions for use in determining present and future decisions.

- An **objective** is a result to be achieved by a stated point in time. It is capable of being quantified and realistically attained considering probable funding and political constraints. Objectives are successive levels of achievement in movement toward a goal, and should be tied to a time specific period for implementation programs.

The remainder of this section contains the goals, policies and objectives for each component of the Amador County transportation system.

State Highway System (SHS)

1. Goals

a. Provide a highway system that is safe, efficient, convenient, comfortable and that meets the travel needs of people and goods and that is compatible with other scenic, historic, economic and recreational resource values.

b. Maintain a level of service (LOS) of "C" or better for average daily conditions as defined within the RTP on all state highways and local streets and roads. Also maintain LOS C or better for the peak hour of the overall intersection operations (i.e., average of all movements). As documented in Chapter IV of this document, LOS C may not be achievable on certain sections of the State Highway System because of prohibitive cost and/or environmental impacts. Therefore, LOS D will be accepted on the SR 88 from the San Joaquin County Line to SR 104 (east jct) in Martell and on SR 88 from SR 49 in Jackson to Climax Road near Pine Grove. In addition, LOS E will be acceptable in Drytown because of funding constraints and priorities.

c. Accomplish the aims and purposes of Caltrans System Planning and the General Plans of each city and the County to the greatest extent feasible.

d. Maintain the safety and operational integrity of the road system resulting from the cumulative traffic increases from both large and small development projects by properly mitigating impacts.

e. Secure adequate road right-of-way dedications in order that future improvements to streets and highways can be constructed where it is shown to be necessary due to the impacts of individual projects or the accumulation of many small projects. These dedications would be required where it can be found that there is a connection between the project traffic impacts, individually or cumulatively, and the existing or eventual overtaxing of the affected road circulation network (either on-site or off-site of the projects). Dedications should be consistent with the Long Range Planning Options as shown in Figure 18 of this document.

f. Enhance opportunities for pedestrian travel by improving the safety of existing pedestrian/vehicle conflict areas and providing more pedestrian facilities (i.e., crosswalks) as a means to encourage non-automobile trips.

2. Policies

a. Amador County supports construction of the State Route 49 Bypass of Sutter Creek and Amador City as the highest priority new state highway project in Amador County. Amador County supports the "4A" (Sutter Creek Bypass with Torre extension) as the preferred alternative for this Bypass project.

b. Amador County maintains that time is of the essence in maintaining acceptable levels of service. Programming of the State Route 49 Sutter Creek Bypass in the 1996 STIP has authorized Caltrans to conduct engineering design and environmental studies for the entire alignment and to pursue timely completion of right-of-way acquisition, construction, design and environmental studies so that the project moves ahead on schedule for delivery by 2002/03.

c. Amador County will fulfill the 1997 Memorandum of Understanding with the Calaveras and Alpine County Local Transportation Commissions which supports the SR 4 North Angels Bypass and two passing lane projects on SR 4 and SR 88 in Calaveras and Amador Counties in exchange for their support of the SR 49 Sutter Creek/Amador City Bypass.

d. Amador County supports the construction of improvements to alleviate expected congestion on State Route 49 through Drytown. Although funds are not expected to be available to construct these improvements by 2016, Amador County will continue to work with Caltrans to address this issue as soon thereafter as possible.

e. Amador County maintains that the SR 49/88 intersection in Martell should be reconstructed and signalized as the region's first priority SHOPP project to be constructed in 1998. Amador County supports Caltrans Alternative "B" as the locally preferred design.

f. Amador County supports construction of the south Jackson Highway 49 widening between French Bar Road and Scottsdale Boulevard to be constructed in 1999.

g. Amador County supports the construction of the SR 104 Interim West Bypass of Ione, as a regional priority project.

h. Amador County supports additional transportation funding at the State level.

i. Amador County supports projects and programs recommended by Caltrans that reduce or eliminate hazardous situations along the State Highway System.

j. Amador County supports the establishment of a regional traffic mitigation fee earmarked to support and encourage improvements to state highways and other components of the regional system adversely impacted by development.

k. Amador County supports the establishment of local traffic mitigation fees for each jurisdiction in the County for improvements to the local system.

l. Until such time as a County-wide regional traffic mitigation fee is adopted by the County and cities, Amador County supports a policy requiring new development projects that may have a significant impact upon the regional circulation system shall be analyzed using the County-wide traffic model to determine and mitigate the impacts they will have on the system.

m. Traffic impacts from development shall be measured in terms of the percent of reserve capacity consumed on a given road or intersection under acceptable conditions (LOS C or D as defined in Goal 1b). Measurements shall be made according to procedures listed in Appendix E of this document. Consumption of 10 percent or more of the reserve capacity of a facility shall be considered a significant impact. Consumption of less than 10 percent of the reserve capacity may also be considered a significant impact if the increase causes a violation of the level of service standard.

n. On roads in which LOS D is deemed acceptable in Goal 1b, a stricter standard of mitigation requirements will be applied to individual projects to ensure impacts are mitigated.

o. The ACTC supports consideration of a County-wide financing mechanism (e.g., sales tax measure) for regional transportation improvements. This mechanism would provide some revenue from tourists and recreational traffic that contribute significantly to the congestion.

p. In addition to a regional traffic mitigation fee program, Amador County supports Caltrans' policy that new commercial, industrial or high-density residential

development approved on highway frontage shall provide additional right-of-way and pavement width to meet projected needs. This policy should not necessarily apply to minor expansions or alterations of existing businesses and/or where bypasses or feasible alternative routes are planned.

q. Passing opportunities that have been lost in Amador County due to federal and state barrier striping requirements should be mitigated by construction of as many additional passing lanes as are operationally feasible and financially fundable without affecting county minimums.

r. County minimum formulas for State funding allocations in rural counties should be adjusted upward to compensate for the amount of out-of-county traffic generated by recreational visitors and tourists.

s. A minimum of 300 feet should be maintained between driveways on all State Highways, arterials and major collector roads in the County as defined by the Federal functional classification system. New public road connections should be spaced at least 1,000 feet apart.

t. Note that two projects currently on the candidate list are not supported by Amador County (i.e., Project 206A, the SR 49 Stage II truck climbing lane, and Project 2400, the SR 88 widening to five lanes east of SR 49in Jackson). The County desires that these projects be removed from the candidate list and the funds be programmed to the next highest priorities shown on Table 12.

3. Objectives

a. Caltrans should expedite engineering, design, environmental activities and acquisition of critical right-of-ways for the SR 49 Sutter Creek/Amador City Bypass.

b. Caltrans District 10 and the ACTC should mutually prepare Project Study Reports (PSRs) as required by G.C. 65086(b). The following lists the ACTC's highest priorities for PSR development.

1. An upcountry passing lane on SR 88 that is desirable to Alpine County.

2. SR 49 - widen to four lanes from SR 88 in Martell to Sutter Street in Jackson.

3. The SR 88 Corridor in Pine Grove to better define the location of the South Bypass and the extent of interim improvements on SR 88.

4. SR 88 - widening to five lanes from SR 104 east junction near Martell to SR 49 in Martell.

5. SR 88 - upgrade improvements from SR 49 to east of Court Street in Jackson.

6. SR 49 - widening to include a median and left-turn lanes from Main Street to Empire Street in Plymouth.

7. SR 88 (portions) - construction of passing lanes and two-way left turn lane between Pioneer Station and Cooks Station.

8. SR 88- road upgrade improvements from east of Court Street to Climax Road near Pine Grove.

9. SR 88 - road upgrade improvements from the San Joaquin County line to SR 104 east junction near Martell.

c. The ACTC should work with Caltrans and local agencies to prepare corridor studies to better define the scope and location of important local improvement projects in addition to those listed on Objective 3.c. above. The following lists the ACTC's additional priorities for study:

1. State Route 49 through and/or around Drytown;
2. The Ridge Road/Climax Road corridor;
3. New Connection to Argonaut Lane east of Westview;
4. Wicklow Way/Sutter Street Extensions;
5. Alternate truck route for SR 104 in Ione;
6. Fiddletown Road; and
7. Shake Ridge Road.

d. Caltrans District 10 must complete all projects currently programmed in the 1996 STIP and 1996/97 SHOPP on schedule.

e. The ACTC will be represented biennially at CTC STIP hearings and will use all other available opportunities to stress the need for regional highway capacity improvement projects to meet identified needs, beginning with the SR 49 Sutter Creek Bypass project, yet not ignoring the need for State Highway System capacity enhancements identified in the RTP for the Jackson, Ione, Pine Grove, Pioneer, and Buckhorn areas.

f. Based on the completion of Caltrans' PSRs on State highway projects, the ACTC shall help to assure that local projects will be consistent with subsequent adopted precise plans.

g. The ACTC and its jurisdictions should work together and with Caltrans to insure proper maintenance and operational integrity of the State Highway System in Amador County.

City Streets and County Roads

1. Goals

a. Provide streets and roads that are safe, efficient, convenient, comfortable, and interconnected to meet the travel needs of all people and goods and that are consistent with other scenic, historic, economic and recreational resource values.

b. Maintain a level of service (LOS) of "C" or better for average daily conditions as defined within the RTP on all local streets and roads. Also maintain LOS C or better for the peak hour of the overall intersection operations (i.e., average of all movements).

c. Accomplish the aims and purposes of the General Plan of each city and the County to the greatest extent feasible.

d. Reduce traffic congestion problems and inadequate safety vehicle access which could result from the cumulative traffic increases from both large and small development projects.

e. Secure adequate road right-of-way dedications in order that future improvements to streets and roads can be constructed where it is shown to be necessary due to the impacts of individual projects or the accumulation of many small projects. These

dedications would be required where it can be found that there is a connection between the project traffic impacts, individually or cumulatively, and the existing or eventual overtaxing of the affected road circulation network (either on-site or off-site of the projects).

f. Enhance opportunities for pedestrian travel by improving the safety of existing pedestrian/vehicle conflict areas and providing more pedestrian facilities (i.e., crosswalks) as a means to encourage non-automobile trips.

2. Policies

a. Amador County supports projects and programs that reduce or eliminate unsafe situations and that relieve congestion.

b. Developers or other permittees shall be required to dedicate the necessary right-of-way widths as a mitigating condition of approval of their project to insure the construction of adequate widths of streets and highways where it has been determined there is an individual or potentially cumulative connection between their project(s) and an adverse effect on the road circulation system in Amador County.

c. Developers or permittees shall either make the necessary improvements, provide acceptable funding assurance or pay fees commensurate with the required improvements in order to mitigate their share of actual or cumulative impacts on the streets and the highways system in Amador County. Developers may be required to construct the improvement(s) in conjunction with their development, and enter into a reimbursement agreement with the appropriate agency to refund the portion of the improvement cost that is beyond fair share level.

d. No dedication of an easement shall be required from any developer, permittee, or applicant unless a nexus is found between the dedication and the project's impact sufficient to meet the holding in Nollan v. Calif. Coastal Comm. (1987) or unless the improvements are mutually agreed in writing by both parties.

e. The ACTC will work with Caltrans and its member jurisdictions in a cooperative effort to coordinate land use decisions with impacts on the state and local transportation system.

f. A minimum of 300 feet should be maintain between driveways on all State Highways, arterials and collector roads in the County. New public road connections should be spaced at least 1,000 feet apart where possible.

g. The ACTC's policy regarding the allocation of Transportation Enhancement Activities (TEA) and Regional Surface Transportation Program (RSTP) Exchange funds is threefold ~~twofold~~. First, it is held in reserve to be used as a source of capital for loans to grant-funded transportation-related projects that operate on a reimbursement basis. Second, it may be used to leverage other public or private funds for important regional Transportation projects that have a high priority in the RTP. Third, it may be used to pay for one-half of the local match required for state funded bridge (HBRR Program) and safety (HES Program) projects when said projects are on regional roads shown in the RTP and subject to project by project discretionary approval of the ACTC.

h. The ACTC's policy regarding the allocation of Local Transportation Funds (LTF) is to be in accordance with the Transportation Development Act (TDA):

1. TDA administration and planning is given first priority;
2. Two percent of the remaining funds are set aside for bicycles and pedestrians;
3. The remainder is allocated for transit purposes after the annual unmet needs process; and
4. Any remaining balance is available to the cities and County for non-transit claims based on their percentage of population.

i. It is the ACTC's policy that LTF funds claimed by the cities and County for streets and roads purposes may be used for street maintenance purposes.

3. Objectives

a. Assure consistency with General Plan Circulation Element updates for all cities to the greatest extent feasible.

b. Accomplish improvements according to the priorities and schedules shown in the RTP Action Element.

c. Each city and the County should prepare specific plans and schedules for projected street and road improvements and adopt realistic funding strategies necessary to ensure said plans are carried out and assure adequate mitigation of development impacts on the entire roadway system.

d. Amador County and other local government agencies should maintain and upgrade the present street and road system whenever feasible.

Public Transit

1. Goals

a. Provide effective, economically feasible and efficient public transportation in Amador County with emphasis on service to the transportation disadvantaged.

2. Policies

a. Amador County shall encourage and support the use of public transportation grants from state and federal programs to the maximum extent possible.

b. The Kirkwood Ski area and other recreation areas to be developed or expanded should be required to provide transit services according to the *Four County Recreational Transit Demand and Feasibility Study*, 1988, to relieve congestion of the existing circulation system.

c. Amador County shall encourage and support both public and private carpool/vanpool programs.

d. Amador County shall promote coordination and consolidation of social service transportation services operating within Amador County.

e. Amador County shall support and promote Elderly and Handicapped accessibility in public transportation to the maximum extent practicable.

f. The ACTC shall support public transit to a maximum that is determined to be "reasonable to meet" according to maintained "reasonable to meet criteria" and the TDA.

g. The ACTC shall require that the Amador Rapid Transit System (ARTS) conform to those recommendations made in the Triennial Performance Audit prepared for the ACTC.

h. The ACTC shall support centralization of transportation services when cost savings or other benefits can be demonstrated.

i. The ACTC shall require that claimants for public transportation funds submit an annual report, not later than September 30 of each year, covering the information in Section 99247 of the Public Utilities Code. This report shall include current year to date and all prior year performance data.

j. The ACTC shall review the "reasonableness criteria" annually.

k. The ACTC shall require ARTS to arrange for notification by any subdivision, shopping center or other major developments that may have an impact on transit services.

l. ARTS shall use its opportunities to provide input on major development projects to identify locations of bus stops, mail stops, snow chain installation, park-and-ride lots, rest areas and require developers to construct appropriate facilities where necessary.

m. The ACTC supports the implementation of cost-effective inter-county transit service.

n. The ACTC's policy regarding State Transit Assistance (STA) funds is that they shall be held as a reserve to loan capital for grant-funded transit facilities that are repaid by grant reimbursements and for other unforseen transit-related expenses.

3. Objectives

a. ARTS shall continue the contract with Valley Mountain Regional Center for services to Amcal Clients.

b. By June 30 of each year, the ACTC shall conduct a public hearing to make a determination in the public record as to whether there are unmet public transportation needs that can reasonably be met through expansion of existing transportation systems or by establishing new systems in the region.

Aviation

1. Goals

a. Provide a safe county airport facility with compatible surrounding land uses that will enhance economic development.

2. Policies

a. Amador County supports development of an airport plan that promotes safety and industry.

b. Amador County shall encourage local agencies to make land use decisions that are compatible with the county airport and its related facilities.

c. Amador County supports the policies and requirements of the Airport Land Use Commission.

d. Amador County shall make every appropriate effort to obtain airport funds and promote equitable federal and state airport funding programs.

3. Objectives

a. The Amador County Board of Supervisors should incorporate the airport master plan into the County's general plan land use and circulation element.

Bicycles and Pedestrians

1. Goals

a. Provide bicycle circulation facilities that are safe, yet effective in relieving congestion and promoting recreation.

2. Policies

a. Amador County encourages recognition of the needs of pedestrian and bicyclists in the transportation planning process. New development projects should be required to provide on-site and contribute toward off-site pedestrian and bicycle facilities.

b. City general plan circulation element updates should contain plans and standards for improvement of pedestrian circulation.

c. Amador County shall encourage the development of bicycle facilities that are in compliance with standards adopted by Caltrans and as required by Section 2375 and 2376 of the Streets and Highways Code on all routes shown as future bicycle routes.

d. Amador County shall encourage local agencies, employers, and businesses to provide safe and secure bicycle storage facilities, shower, locker and dressing facilities and flexible work hours to promote maximum utilization of the bicycle as a means of commuter travel.

e. The ACTC's policy regarding allocation of its LTF bicycle and pedestrian set-aside account is that the funds shall be used for the highest priority facilities based on the yet-to-be-completed County-wide Bicycle and Pedestrian Plan.

3. Objectives

a. The County-wide Bicycle and Pedestrian Plan Update should be completed in 1998 and its results incorporated into the RTP and cities' circulation elements.

Rail and Goods Movement

1. Goals

a. Promote the continuous flow of goods in and out of the County in a safe and economically efficient manner.

2. Policies

a. Amador County shall support efforts that will continue and improve rail service by railroads operating in Amador County.

Transportation Systems Management (TSM)

1. Goals

a. Increase the usage of TSM techniques as an economical means of reducing existing and projected traffic congestion.

2. Policies

a. All circulation studies and plans prepared in the region should contain realistic options and recommendations for usage of TSM as a means of reducing traffic congestion.

b. Cities should develop parking plans and impact fee ordinances to insure projected parking needs will be met, reduce the effects of inadequate parking upon traffic congestion and, where feasible, add traffic lanes on existing streets and roads.

c. Shopping centers and similar developments may be required to pay their fair share to provide space for park-and-ride facilities within their development. Subject to a jurisdiction's concurrence, a development project may be allowed to substitute a park-and-ride facility to offset other impacts.

3. Objectives

a. The ACTC should complete an inventory of all TSM measures currently undertaken in Amador County and prepare a long range TSM plan that establishes goals and policies related to TSM measures, including transportation management agencies (TMAs) in the private sector.

b. The ACTC will ascertain whether or not TSM measures will be a positive addition to any sales tax measures presented to the voters for approval in a general election.

Air Quality

1. Goal

a. Improve air quality in Amador County through improvements to the transportation system and incentives to reduce single-occupant auto travel.

2. Policies

a. Because the air quality in Amador County is directly impacted by the San Joaquin Valley, the ACTC shall work with Caltrans, the Amador County Air Pollution Control District, the San Joaquin Valley Air Pollution Control District and the regional planning agencies from the adjacent counties toward the improvement of air quality through regional transportation improvements.

b. Amador County shall assist the Amador County Air Pollution Control District with the development of transportation control measures that will be needed to meet the required emission reductions of the California Clean Air Act. Measures may include trip reduction measures such as bus turnouts, incentives to rideshare, vanpool, park-and-ride lots and alternative fuels.

c. Amador County shall support the Amador County Air Pollution Control District in their efforts to establish a monitoring program to more accurately determine the status of air quality in Amador County.

IV. ACTION ELEMENT

The Action Element sets forth a plan of action to address issues and needs identified in accordance with the Plan's goals, objectives and policies. It identifies short-range (0-7 years) and mid- to long-range (8-20 years) transportation improvements for inclusion in the Regional Transportation Improvement Program (RTIP).

The beginning of the action element focuses on past accomplishments, and the state and regional planning processes. The remainder of the element contains the short-term and long-term improvements that were selected for each component of the transportation system.

PAST ACCOMPLISHMENTS

One of the most significant recent accomplishments has been the CTC's decision to program Phase I of the State Route 49 Sutter Creek Bypass in the 1996 STIP. This project has been the ACTC's priority State highway project for more than a decade. In order to obtain the programming within the limitations of the 1996 STIP, the ACTC completed two important tasks. First, the project was "downscoped" from the previous project to include only the portion circumventing downtown Sutter Creek. Second, the ACTC entered into an agreement with Calaveras County to jointly pursue the funding of major highway projects in each jurisdiction. Calaveras County agreed to shift $3.5 million originally programmed in 1992 for the SR 4 North Angels Bypass to the SR 49 Sutter Creek Bypass in 1996 in return for the ACTC's funding support of the SR 4 North Angels Bypass in the 1998 STIP.

In 1997, the Cities of Amador City, Sutter Creek, and the Amador County Board of Supervisors requested the ACTC to investigate the possibilities for extending the SR 49 Bypass around Amador City along an alignment known as the "Torre" extension. The ACTC then carried out the following actions.

1. The ACTC and citizens from Amador County, Amador City, and Sutter Creek approached Calaveras County for an amendment to the pre-existing memorandum of understanding concerning sharing STIP funds for mutual benefits. Calaveras County agreed to contribute the necessary $5 million from pooled STIP funds in order to help ensure that the CTC would fund the extension in the 1998 STIP.

2. The ACTC urged Caltrans to shift focus of the environmental assessment being prepared for the Sutter Creek Bypass to include the Torre extension even before it is approved by the CTC so that the project delivery schedule would not be severely delayed.

3. The ACTC urged Caltrans to prepare a Supplemental Project Study Report (SPSR) so that the community could be ready to ask the CTC to fund the extension in the 1998 STIP.

4. The ACTC delayed adoption of the 1996 Regional Transportation Plan to include the Torre extension as the locally preferred alternative and to remove previous policies concerning the 3R and Tonzi Road alternatives.

5. The ACTC and Caltrans carried out meetings with property owners affected by the proposed Torre extension to investigate alternative alignments for the extension and mitigation measures that should be incorporated into the extension.

6. In the course of the above-described activities, the Alpine County Local Transportation Commission also requested addition to the MOU between Amador and Calaveras Counties. Alpine County felt that a three-county union would show better support for the SR 4 North Angels Bypass and needed SR 88 improvements, both of which affect travel to Alpine County. In addition, Alpine County desires two upcountry passing lane projects on SR 4 in Calaveras County and SR 88 in Amador County. Alpine County has been added and a new three county MOU has been executed and ratified by the Boards of Supervisors of each county.

Another important accomplishment was the widening of State Route 49 at the Ridge Road intersection in Sutter Hill, including the construction of the County's first traffic signal. This project was completed in the Fall of 1994. In addition, the State Route 88 widening and passing lane project east of Pine Grove was completed in 1996. Replacement of the SR 49 bridge crossing of Dry Creek was also completed in 1996.

In October of 1996, Caltrans District 10 published its Candidate List of Projects in Amador County. Appendix C includes a complete list of all future candidate projects in Amador County. (Please refer to Tables 10-13 of this document to compare the candidate list to the ACTC's somewhat different priority list of projects). Amador County's number one priority project remains the State Route 49 Sutter Creek Bypass project. The candidate list has included this priority project since 1989, and the 1996 STIP schedules it for construction in

FY 2001/02. Following the commitment to Calaveras and Alpine Counties, Amador County's next highest priority major highway improvement will include State Route 88 in Martell, Jackson, Pine Grove, and Pioneer, and State Route 104 in Ione. Improvements to SR 49 in Plymouth and Drytown will also be priorities.

STATE AND REGIONAL PLANNING PROCESSES

The state and regional planning processes are defined by legislation on the federal and state level. ISTEA has had the most profound effect on these processes in the past few years with new requirements for transportation planning, air quality conformity and the allocation of federal funds. The discussion of state and regional planning processes is generally described below as it relates to the RTP.

State Planning Process

State planning for highways is accomplished through several planning processes that identify improvement projects as they are needed. These processes culminate in the biennial State Transportation Improvement Program (STIP) and a State Highway Operation and Protection Program (SHOPP). The STIP is for capacity-enhancing projects such as new routes and new highway lanes. The SHOPP is for rehabilitation, safety, and operational improvements on existing highways. Based on State-mandated formulas, the Amador County region is apportioned "county shares" which may be spent on regional road or highway improvements. In addition, Caltrans may bid highway improvements for STIP funding through the Interregional Improvement Program (IIP).

Caltrans is responsible for State highway improvements of a non-capacity increasing nature for rehabilitation, safety or operational improvements via the SHOPP. These projects do not count against the County minimums. The SHOPP is a four-year program although mid-cycle revisions are usually made. The last SHOPP was adopted in 1996. Caltrans considers the RTP and the County's input in its preparation of the SHOPP and mid-cycle revisions.

Caltrans also has a long-term planning process called System Planning, which was initiated by Caltrans in 1983 and has been undergoing review and updating to conform to SB 300, SB 1435 and AB 471 requirements. Traditionally, this process involves an individual study of the long-range concept of each state route over a 20-year planning horizon and beyond.

Regional Planning Process

In response to AB 69 (1972), the regional transportation planning process was initiated throughout California in 1973. The Amador County Transportation Commission was designated as the Regional Transportation Planning Agency (RTPA) for Amador County. In compliance with state statutes, the ACTC is comprised of three members appointed by the County Board of Supervisors and three members appointed by the City's Select Committee representing five incorporated cities in the County. An organizational chart is shown at the beginning of this document.

A primary responsibility of the ACTC is to adopt and update the Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) in accordance with state law. The ACTC is also responsible, with city and County input, for determining the priorities for all proposed new transportation facilities shown in the RTP. The previous schedule required that the RTP be submitted to the CTC and Caltrans by August 1 of even numbered years. However, California Senate Bill 1435 changed this deadline to December 1 of all even numbered years. Most recently, Senate Bill 45 enables Amador County to update its RTP by December 1 of every fourth year beginning in 1998.

Each fiscal year the ACTC approves the Overall Work Program (OWP). This document outlines the transportation planning work to be accomplished, including responsible agencies and funding, in order to ensure an adequate and up-to-date RTP is maintained. The Work Program must be approved by Caltrans before State and Regional Planning Assistance Funds (SRPAF) can be used for transportation planning studies or administration.

In general, the transportation planning process focuses on the annual OWPs which are intended to ensure the continuous update and improvement of RTPs. The OWP programs preparation of each RTP update. It may also program funding to update general plan circulation elements or various background transportation studies to be undertaken. Such studies are usually concentrated in areas with current or anticipated future circulation problems, although they may also be directed at making existing systems more efficient.

Beginning in 1990, each RTPA must biennially prepare and adopt a RTIP document and submit this document to the CTC and Caltrans by December 15 of odd numbered years. The RTIP is to include all major projects proposed for funding from "regional shares" of the STIP funds as well as the Transportation Enhancement Activities (TEA) program, the bridge

replacement (HBRR) program, the Hazard Elimination and Safety (HES) program and other programs. All major projects are to be listed in priority order with current cost escalated to the anticipated delivery year. Together, the RTP shows the policies and actions the county wishes to pursue and the RTIP reinforces this with a biennial assessment of the priority projects for the County.

LOCAL AND REGIONAL ACTION PROGRAMS

The local and regional action programs were developed during the 1994 Amador County Regional Transportation Planning Study and subsequently updated for this 1996/97 effort. An evaluation process was used during this study in order to screen options at varying levels of detail as the mechanism to select the most viable improvements. The following is a summary of the process undertaken to evaluate various improvement options.

Planning Process - Evaluation of Improvement Options

In conjunction with the 1996/97 Amador County Regional Transportation Studies, several improvements options were discussed and evaluated for inclusion in the RTP/Circulation Element. The evaluation process was undertaken in four primary steps:

- Step 1 - Initial Improvement Options;
- Step 2 - Initial Agency and Public Input;
- Step 3 - Evaluation of Benefit to Traffic Operations; and,
- Step 4 - Evaluation of Other Key Factors (i.e., environmental constraints, cost estimates, and funding considerations).

This process was designed to screen options at varying levels of detail as the mechanism to select the most viable improvements. The following provides a description of each step.

Step 1 - Initial Ideas

An initial set of improvement options was developed based on the future traffic volumes and resulting deficiencies anticipated by 2016 . The options included many improvements that had been proposed in previous studies, as well as new ideas developed in conjunction with this study.

Step 2 - Initial Agency and Public Input

The ACTC and the County Board of Supervisors then held public meetings to discuss these options and select those to be the subject of further study. As a result of their direction, the several adjustments were made to the initial options.

Step 3 - Evaluation of Benefit to Traffic Operations

The next step in the screening process was to determine whether the improvement options provided the level of benefit to traffic operations to merit further consideration. Each option was input into the Year 2016 traffic model and evaluated in terms of the level of benefit it provided to the deficiencies identified. Based on the results of the analysis, each option fell into one of the following three categories.

Category 1. The option provides a significant level of benefit to regional traffic operations in 2016. These options were the subject of further evaluation in Step 4.

Category 2. The option provides some benefit, but not enough to warrant further evaluation given the level of benefit provided by other options. These options were removed from consideration for the 20-year regional improvement program; however, many were considered as potential long range planning options (i.e., will provide significant benefit after 2016).

Category 3. The option provides little or no benefit to regional traffic operations. These options were removed from further consideration as potential regional improvement projects. Some Category 3 projects were maintained for consideration as beneficial for local circulation.

Step 4 - Evaluation of Other Key Factors

The Category 1 Options from Step 3 were the primary subject of Step 4. This step involved the evaluation two other key factors of an improvement option: (1) physical and environmental constraints and (2) cost estimates. The results of this component of the evaluation are included in the working papers and background reports prepared for the Martell Area Circulation Plan, the Ione Circulation Element, the Jackson Circulation Element, and the Amador County Regional Transportation Plan.

The following improvements for the roadway system (including intersections), transit, aviation, bikeway and pedestrian facilities, rail and goods movement, and air quality alleviate existing transportation problems or they accommodate future travel demand.

Regional Road System (Year 2016)

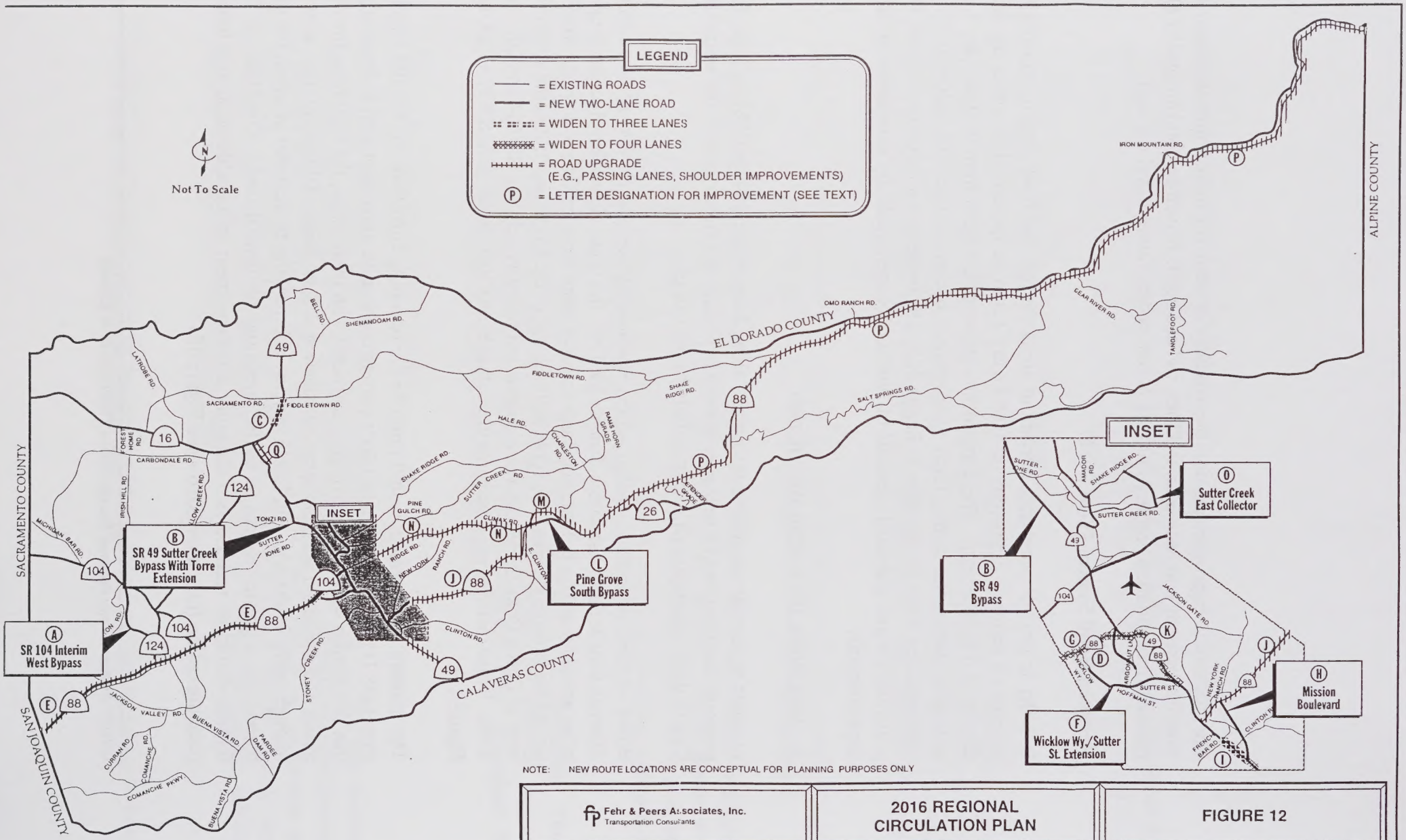
In order to provide acceptable operations along the regional road system, Amador County proposes a series of improvements (see Figure 12) to be sponsored by either the State, the County or a member city. These improvements were developed from the Category 1 options evaluated during the study. Each improvement option is described below (refer to the corresponding letter designations in Figure 12). The implementation cost, schedule, order of prioritization and proposed methods of funding are identified in a subsequent summary of improvements.

A. State Route 104 Interim West Bypass

In order to provide acceptable operations along State Route 104 and 124 in Ione, the City proposes construction of a new arterial route bypassing downtown Ione on the west side of the City to divert through traffic, particularly heavy trucks.

Based on the results of the *Analysis of Improvement Options for the City of Ione Circulation Element*, Fehr & Peers Associates, January 29, 1997, this improvement involves the construction of an arterial roadway to State standards to serve some local traffic and to route truck traffic around the downtown area. The route includes use of the North-South Arterial road proposed west of Castle Oaks Drive and a new segment of roadway between SR 104 and Old Stockton Road. It also includes improvements to existing Buena Vista Road from SR 88 to SR 124 (see Figure 13).

This interim improvement would improve the operating conditions on SR 104 and SR 124 from LOS D to C. Although the City's current cooperative agreement with Caltrans stipulates that this interim west bypass will be constructed with local funds, the City feels the regional nature of the problem warrants some contribution of State funds. Ultimately (i.e., after 2016), through traffic in the area will likely increase substantially to the level in which the ultimate bypass has a greater benefit to traffic operations for central Ione. The Ultimate SR 104 Bypass should be retained as a Category 2 improvement for consideration as a long range planning option (i.e., after 2016 - see Figure 18).



NOTE: NEW ROUTE LOCATIONS ARE CONCEPTUAL FOR PLANNING PURPOSES ONLY

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2016 REGIONAL CIRCULATION PLAN

FIGURE 12

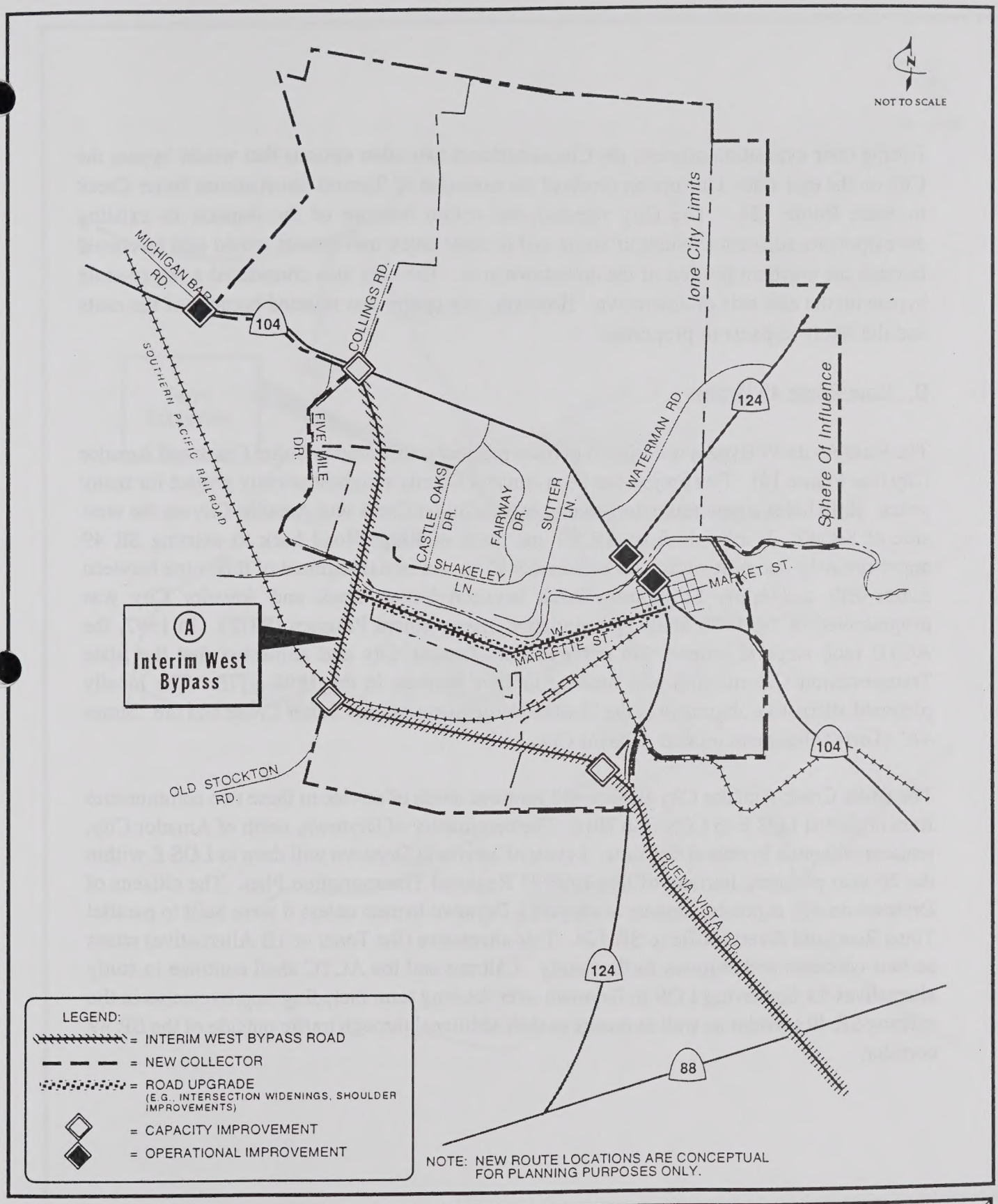

FIGURE 13

IONE AREA
2016 ROADWAY SYSTEM

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Transportation Consultants

During their evaluation process, the City considered two other options that would bypass the City on the east side. One option involved the extension of Summit Street across Sutter Creek to State Route 124. The City rejected this option because of the impacts to existing developments adjacent to Summit Street and because truck movements would still be routed through the northern portion of the downtown area. The City also considered a larger-scale bypass on the east side of downtown. However, this option was rejected because of the costs and the likely impacts to properties.

B. State Route 49 Bypass

The State Route 49 Bypass is designed to route regional traffic around Sutter Creek and Amador City (see Figure 14). This project has been Amador County's highest priority project for many years. It includes a new route designed to bypass Sutter Creek and Amador City on the west side of SR 49. It extends from SR 49 just north of Ridge Road back to existing SR 49 approximately one mile northwest of Amador City. An initial segment of this route between Sutter Hill and upper Stringbean Gulch between Sutter Creek and Amador City was programmed in the 1996 State Transportation Improvement Program (STIP). In 1997, the ACTC took steps to extend this route around Amador City and requested that the State Transportation Commission add funding for this purpose in the 1998 STIP. The locally preferred alternative alignment is the "Sutter 3" alignment around Sutter Creek and the "Sutter 4A" (Torre) alignment around Amador City.

The Sutter Creek/Amador City Bypass will improve levels of service in these two communities from projected LOS E to LOS C in 2016. The community of Drytown, north of Amador City, remains without a bypass at this time. Levels of service in Drytown will drop to LOS E within the 20-year planning horizon of this 1996/97 Regional Transportation Plan. The citizens of Drytown do not, at present, appear to support a Drytown bypass unless it were built to parallel Tonzi Road and divert traffic to SR 124. This alternative (the Tonzi or 1B Alternative) raises serious concerns and requires further study. Caltrans and the ACTC shall continue to study alternatives for improving LOS in Drytown over the long term including improvements in the existing SR 49 corridor as well as means to shift additional through traffic outside of the SR 49 corridor.

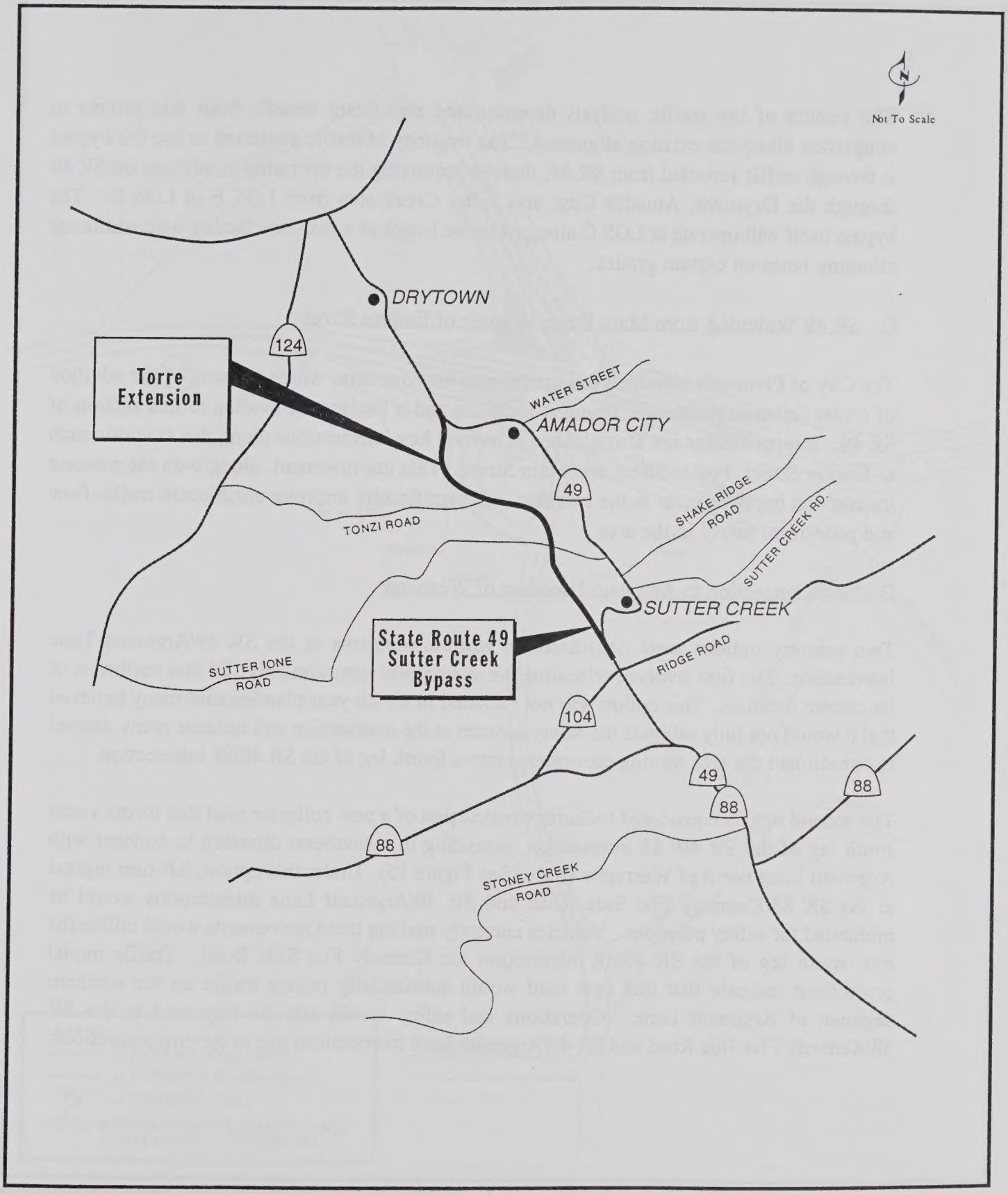

FIGURE 14	STATE ROUTE 49 BYPASS	Fehr & Peers Associates, Inc. Transportation Consultants

APRIL 8, 1997

The results of the traffic analysis demonstrated significant benefit from this project to congestion along the existing alignment. The majority of traffic projected to use the bypass is through traffic rerouted from SR 49, thereby improving the operating conditions on SR 49 through the Drytown, Amador City, and Sutter Creek area from LOS E to LOS C. The bypass itself will operate at LOS C along its entire length as a two-lane facility with additional climbing lanes on certain grades.

C. SR 49 Widening from Main Street to south of Empire Street

The City of Plymouth identified this operational improvement, which consists of the addition of center left-turn pockets at strategic locations and a landscaped median to this section of SR 49. Improvements are also planned at several key intersections along this corridor such as Empire Street, Poplar Street and Main Street. This improvement, along with the planned intersection improvements in the corridor, will significantly improve north-south traffic flow and pedestrian safety in the area.

D - New Connection to Argonaut Lane east of Westview

Two primary options were considered to address problems at the SR 49/Argonaut Lane intersection. The first involved relocating the intersection approximately 120 feet northwest of its current location. This option was not included in the 20-year plan because many believed that it would not fully mitigate the safety concern at the intersection and because many desired to consolidate the area turning movements into a fourth leg of the SR 49/88 intersection.

The second option considered includes construction of a new collector road that forms a new south leg of the SR 49/ 88 intersection, extending in a southeast direction to connect with Argonaut Lane north of Westview Drive (See Figure 15). Under this option, left-turn ingress at the SR 88/Kennedy Flat Side Road and SR 49/Argonaut Lane intersections would be prohibited for safety purposes. Vehicles currently making these movements would utilize the new south leg of the SR 49/88 intersection via Kennedy Flat Side Road. Traffic model projections indicate that this new road would substantially reduce traffic on the northern segment of Argonaut Lane. Operations and safety would also be improved at the SR 88/Kennedy Flat Side Road and SR 49/Argonaut Lane intersections due to the turn restrictions.

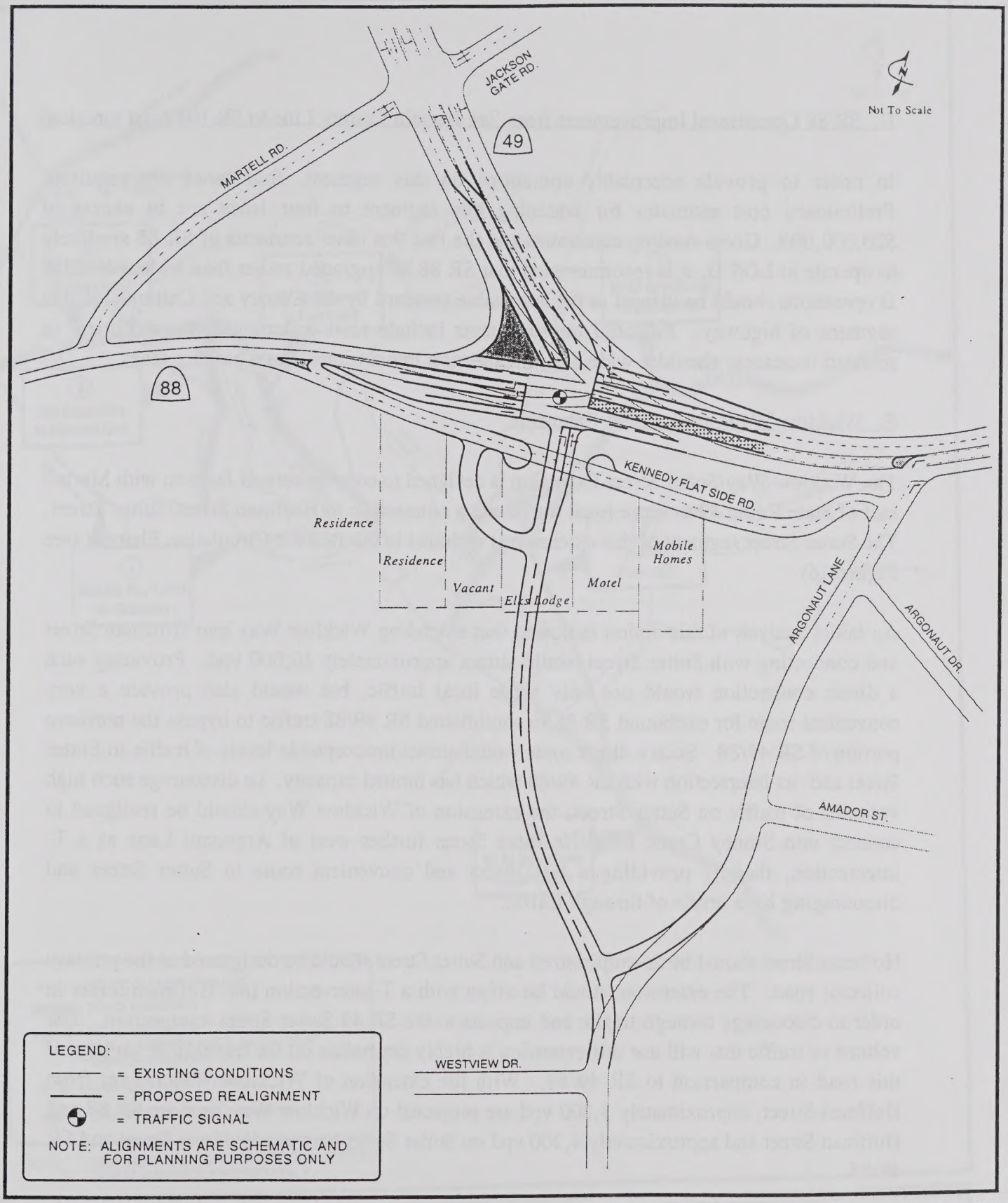

FIGURE 15

NEW CONNECTION TO ARGONAUT LANE

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E. SR 88 Operational Improvements from San Joaquin County Line to SR 104 (east junction)

In order to provide acceptable operations on this segment, four lanes are required. Preliminary cost estimates for widening this segment to four lanes are in excess of $20,000,000. Given funding constraints and the fact that other segments of SR 88 are likely to operate at LOS D, it is recommended that SR 88 be upgraded rather than widened. LOS D operations should be viewed as the acceptable standard by the County and Caltrans for this segment of highway. Potential improvements include road widening and realignment in selected locations, shoulder widening, intersection improvements and passing lanes.

F. Wicklow Way/Sutter Street Extension

The Wicklow Way/Sutter Street Extension is designed to connect central Jackson with Martell east of State Route 49 to serve local traffic via a connection to Hoffman Street/Sutter Street. The Sutter Street segment of this extension is included in the Jackson Circulation Element (see Figure 16).

An initial analysis of this option indicated that extending Wicklow Way into Hoffman Street and connecting with Sutter Street would attract approximately 10,000 vpd. Providing such a direct connection would not only serve local traffic, but would also provide a very convenient route for eastbound SR 88 to southbound SR 49/88 traffic to bypass the northern portion of SR 49/88. Such a direct route would attract unacceptable levels of traffic to Sutter Street and its intersection with SR 49/88 which has limited capacity. To discourage such high volumes of traffic on Sutter Street, the extension of Wicklow Way should be realigned to connect into Stoney Creek Road/Hoffman Street further west of Argonaut Lane as a T-intersection, thereby providing a less direct and convenient route to Sutter Street and discouraging high levels of through traffic.

Hoffman Street should be de-emphasized and Sutter Street should be designated as the primary collector road. The extension should be offset with a T-intersection into Hoffman Street in order to discourage through traffic and impacts to the SR 49 Sutter Street intersection. The volume of traffic that will use this extension is highly dependant on the travel time savings of this road in comparison to SR 49/88. With the extension of Wicklow Way off-set from Hoffman Street, approximately 3,300 vpd are projected on Wicklow Way between SR 88 and Hoffman Street and approximately 4,200 vpd on Sutter Street between Hoffman Street and SR 49/88.

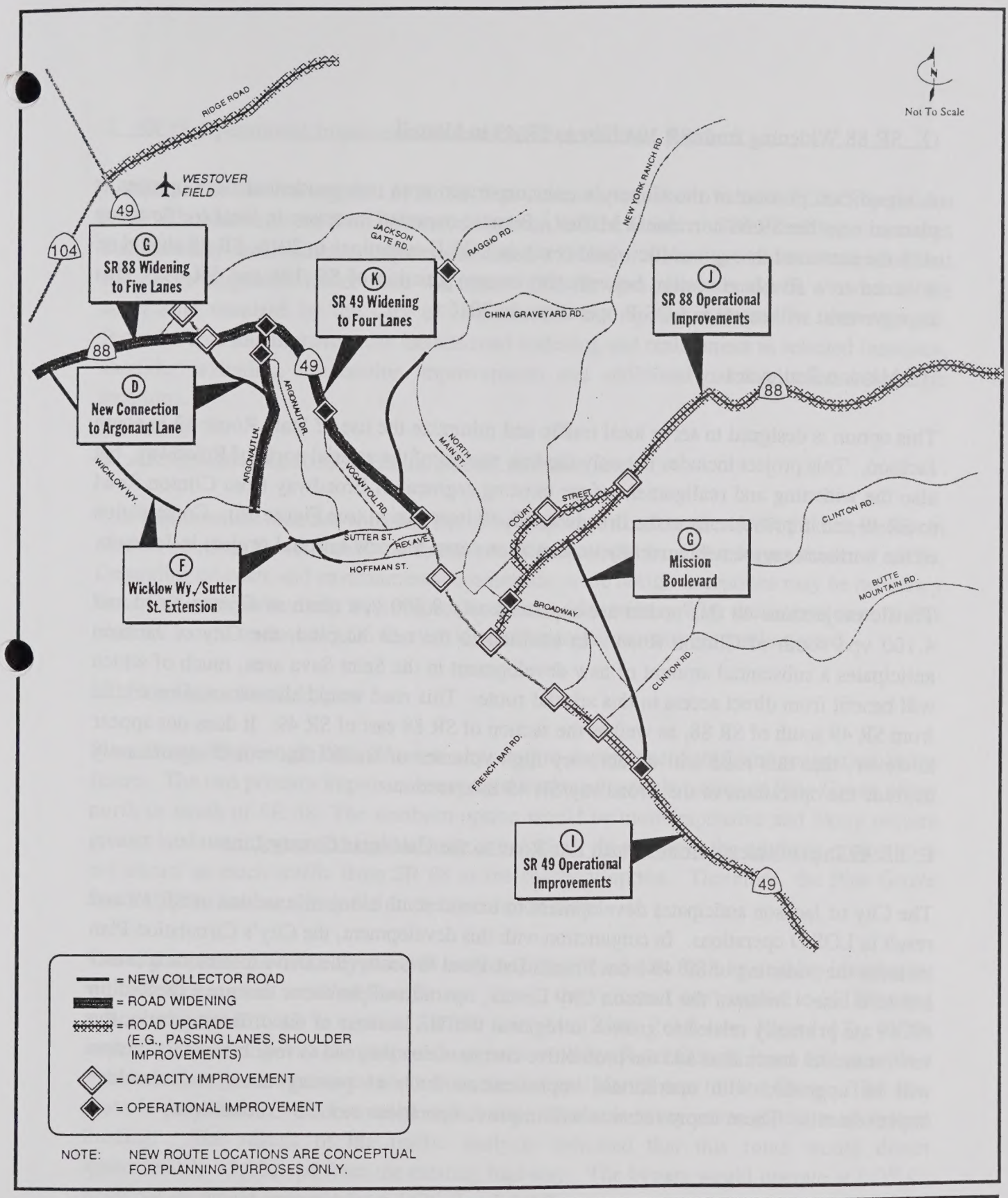

FIGURE 16

JACKSON AREA
2016 ROADWAY SYSTEM

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Transportation Consultants

G. SR 88 Widening from SR 104 East to SR 49 in Martell

A significant portion of the County's unincorporated area non-residential development is planned near the SR 88 corridor in Martell. Because expected increases in local traffic along with the increased through traffic would result in LOS E operations in 2016, SR 88 should be widened to a five-lane section between the eastern junction of SR 104 and SR 49. This improvement will result in LOS B operations in 2016.

H. Mission Boulevard

This option is designed to serve local traffic and minimize the use of State Route 49 in south Jackson. This project includes not only the new section of the arterial north of Broadway, but also the widening and realignment of the existing segment of Broadway from Clinton Road to SR 49 and improvements to the Broadway/SR 49 intersection (see Figure 16). Construction of the northern segment is currently underway to serve the new hospital project in Jackson.

Traffic projections on this option are approximately 9,300 vpd north of Clinton Road and 4,100 vpd south of Clinton Road. In addition to the new hospital, the City of Jackson anticipates a substantial amount of new development in the Saint Sava area, much of which will benefit from direct access to this arterial route. This road would also serve some traffic from SR 49 south of SR 88, as well as the section of SR 88 east of SR 49. It does not appear however, that this road will attract very high volumes of traffic that would significantly degrade the operations of the Broadway/SR 49 intersection.

I. SR 49 Improvements from French Bar Road to the Calaveras County Line

The City of Jackson anticipates development to extend south along this section of SR 49 and result in LOS D operations. In conjunction with this development, the City's Circulation Plan includes the widening of SR 49 from French Bar Road to Scottsville Drive to include a center left-turn lane. South of the Jackson City Limits, operational problems that are expected on SR 49 are primarily related to growth in regional traffic. Because of the difficult terrain, the environmental constraints and the prohibitive cost to widen the road to four lanes, this section will be upgraded with operational improvements such as passing lanes and shoulder improvements. These improvements will improve operations to LOS C conditions.

J. SR 88 Operational Improvements from SR 49 to Climax Road

Similar to the western segment of SR 88, four lanes are required to achieve LOS C operations in 2016 on this segment from downtown Jackson to Pine Grove. Given funding constraints and the likely environmental impacts associated with major widening, it is recommended that SR 88 be upgraded rather than widened. LOS D operations should be viewed as the acceptable standard by the City of Jackson, the County and Caltrans on this segment. Potential upgrade improvements include road widening and realignment in selected locations, shoulder widening, intersection improvements and additional passing lanes at strategic locations.

K. SR 49 Widening from SR 88 in Martell to Sutter Street

This improvement inculdes widening SR 49 to four lanes from the SR 49/SR 88 intersection in Martell south to Sutter Street. A fourth travel lane would be added for southbound traffic. Depending on costs and environmental constraints, some design exceptions may be necessary from Caltrans, particularly with respect to the shoulder width. With the improvements, this segment would operate at LOS C, even if no other improvements are implemented.

L. Pine Grove South Bypass

State Route 88 through Pine Grove is expected to experience significant congestion in the future. The two primary improvement options evaluated were bypasses of Pine Grove either north or south of SR 88. The northern option would be more expensive and likely require greater land use impacts and right-of-way acquisition. In addition, the northern option does not attract as much traffic from SR 88 as the southern option. Therefore, the Pine Grove South Bypass has been included in the circulation plan.

The alignment of the south Bypass will extend Climax Road east from its existing intersection with SR 88 to a point south of Pine Grove. It will then proceed east parallel to SR 88 along a new alignment until it rejoins SR 88 near Mt. Zion Road (see Figure 17). This improvement, along with the proposed upgrade of Ridge Road/Climax Road will provide a significantly improved east-west route from the Jackson/Martell area to Pine Grove. This new route is proposed to be constructed to full state standards using interregional road system funding. The results of the traffic analysis indicated that this route would divert approximately 13,100 vpd from the existing highway. The bypass would operate at LOS C, while SR 88 would improve from LOS F to LOS C.

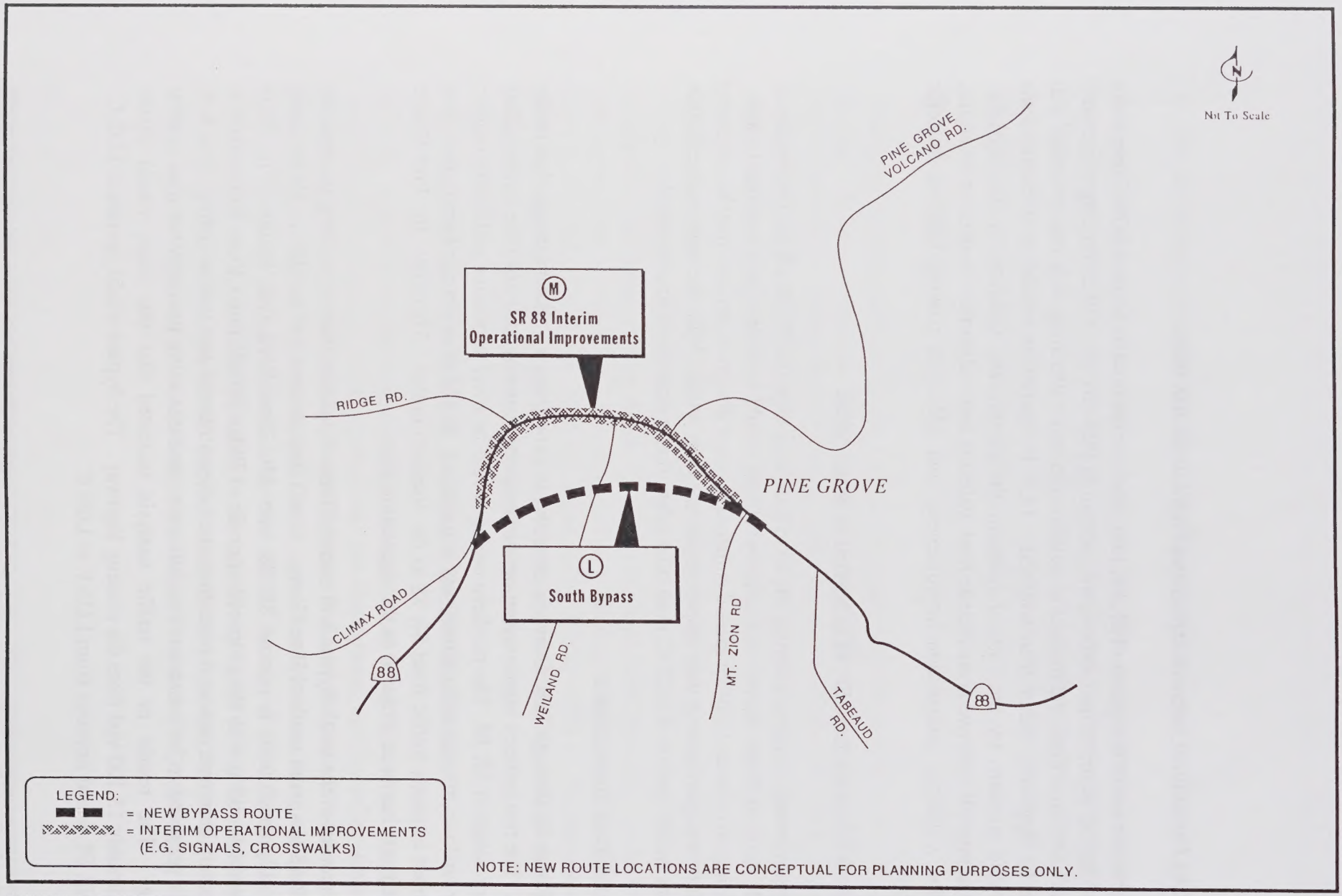


FIGURE 17	STATE ROUTE 88 IMPROVEMENTS IN PINE GROVE	Fehr & Peers Associates, Inc. Transportation Consultants

APRIL 8, 1997

M. SR 88 Interim Improvements in Pine Grove

SR 88 through Pine Grove is currently experiencing unacceptable operations. Recognizing that it may be several years before the South Bypass is built, interim improvements are necessary for operational and safety purposes. Example improvements could include the signalization of the SR 88/Ridge Road intersection when warrants are met, a flashing beacon at the SR 88/Pine Grove/Volcano Road intersection, signing and striping improvements, and sidewalks and crosswalks for pedestrian safety (see Figure 17).

More detailed studies of the corridor are needed to identify the most appropriate type and locations of improvements. The studies should consider a variety of issues including sight distance considerations, speed surveys, accident evaluation, traffic signal warrants analysis, pedestrian counts and surveys, etc.

N. Ridge Road/Climax Road Operational Improvements

The Ridge Road/Climax Road corridor is frequently used as a regional east-west route through the central part of the County. The results of the traffic analysis indicated that if this corridor were upgraded, it would reduce the volume of traffic on SR 88 from SR 49 to Pine Grove and improve east-west circulation in the region.

In 1996, the ACTC commissioned the *Ridge Road/Climax Road Phase II Preliminary Engineering Study*, HDR Engineering June, 1996, which concluded that varying degrees of improvements were feasible to improve the capacity and safety of the road. The report estimated that more than $30 million would be required to improve to road to full state standards. Given the funding constraints, this option was deemed unrealistic for this plan. However, the plan does propose a smaller level of investment to upgrade the Ridge Road/Climax Road corridor by providing passing lanes, shoulder improvements, alignment modifications, and intersection improvements. Example locations could include improvements at key intersections (i.e., New York Ranch Road, Running Gold, Upper Ridge Road), lane and shoulder widening in selected locations, signing and striping improvements, and passing lanes along the western portion of Ridge Road. More detailed studies of the corridor are recommended to identify the highest priority locations based on available funding.

O. Sutter Creek East Collector Road

The Sutter Creek East Collector Road is designed to serve local traffic and minimize the use of State Route 49 through downtown Sutter Creek. The primary intent of this route is to serve as a collector road for new development on the east side of Sutter Creek between Gopher Flat Road and Sutter Creek-Volcano Road. This project is contained in the Sutter Creek Draft Circulation Element.

Under 2016 conditions, approximately 3,500 vpd are projected to utilize this route. Most of this traffic would be diverted from SR 49 within the downtown Sutter Creek area. While this improvement in itself would not improve the service level to better than LOS F on SR 49 through Sutter Creek, it does alleviate some of the local traffic that would otherwise use SR 49. This option, in combination with the SR 49 Bypass, will likely reduce traffic on existing SR 49 through central Sutter Creek and significantly improve traffic operations.

The County also considered additional segments of this new collector road both north to SR 49 and south to Ridge Road. These extensions were not included in the proposed 2016 circulation plan, but are included as recommended long-range planning options for consideration after the 20-year time frame (see Figure 18).

P. SR 88 Operational Improvements east of Pine Grove to the Alpine County Line

This improvement will add passing lanes along SR 88 from east of Pine Grove to the Alpine County line. These passing lanes will increase the roadway's capacity by allowing for more opportunity to pass. Based on the level of implementation proposed in this plan, the operating conditions of SR 88 would be expected to improve to LOS C from east of the Pioneer area to the County line with selected improvements.

Q. SR 49 Northbound Passing Lane from Drytown to SR 16

This improvement involves construction of a passing/climbing lane on SR 49 in the northbound direction beginning just north of the Dry Creek Bridge in Drytown to SR 16. With this improvement in place, operating conditions would improve to LOS C on this segment in 2016.

Intersection Improvements

The following provides a general discussion of the effects of the recommended roadway improvements on several key intersections of regional significance in Amador County. Where appropriate, a general description of potential improvements is also given for specific locations.

- State Route 49 @ State Route 88 in Jackson

  The City of Jackson is currently working with Caltrans to install a traffic signal at this intersection using a combination of local and Minor funding. The signal is scheduled to be installed in 1998/99. A key concern relates to the effect of the back-up of waiting cars on SR 88 reaching the Broadway intersection.

- State Route 49 @ Main Street in Jackson

  The City of Jackson is also working with Caltrans to install a traffic signal at this intersection using a combination of local and Minor funding. The signal is scheduled to be installed in 1998/99.

- SR 49 @ SR 88 in Martell

  Caltrans staff are working with the ACTC and the County Public Works department to identify improvements to this intersection. According to Draft Project Report, the preferred option involves the reorientation of the intersection to intersect SR 49 into SR 88 as a signalized T-intersection (Alternative "B"). This improvement would reduce travel speeds in the area and improve sight distance. Minor modifications will also be made to the super-elevation of SR 49 in the area to improve truck movements. This project is currently programmed as a 1998/99 SHOPP project, and includes $468,000 from SHOPP funds and $512,000 in local funding from the STP funds and development impact fees.

  In the future, the New Connection to Argonaut Lane (Improvement D) includes the addition of a fourth leg to this intersection for improved safety at the SR 49/Argonaut Lane intersection.

- SR 49 @ Argonaut Lane

  This intersection has a high accident rate caused by restricted sight distanced for left-turning vehicles. The New Connection to Argonaut Lane (Improvement D) will afford an opportunity to eliminate left-turn egress from Argonaut Lane to SR 49. Access will instead be provided via a fourth leg to the SR 49/88 intersection in Martell.

- SR 49 @ Jackson Gate Road/Martell Cutoff Road

  Limited sight distance and high travel speeds on SR 49 have caused this intersection to be rated as one of the highest accident rate locations in Amador County. The proposed signalization and turn-lane improvements at the SR 49/88 intersection in Martell are expected to increase the availability of gaps in traffic flow on SR 49 at the Jackson Gate Road/Martell Cutoff Road intersection. If accidents are still prevalent at this intersection after the SR 49/88 improvements are in place, left-turn access may be eliminated and shifted to U-turning movements at the SR 49/88 signal.

- State Route 16 @ State Route 49

  Ultimately, this intersection will be directly affected by the SR 49 Bypass. In the short term, improvements may be necessary to serve increasing demand. The intersection may eventually serve volumes to a level that meets warrant criteria for a traffic signal. Any improvements to this intersection should consider the effect on the SR 16/SR 124 intersection due to its close proximity.

- State Route 49 @ Main Street in Plymouth

The City of Plymouth and the owner of the property on the southwest corner have worked closely with Caltrans to identify improvements including the addition of pavement on Main Street and SR 49 to improve channelization and add a northbound left-turn bay on SR 49. The property owner will also construct the pavement necessary to provide an exclusive eastbound right turn lane in the future, but will be used for on-street parking in the short term. This improvement will consolidate some of the existing driveways on the southwest corner of the intersection. The City proposes to install a flashing beacon at this intersection to reduce overall speeds on SR 49 and to alert motorists of the potential for conflicting turning movements and pedestrians. By 2016, additional improvements may be necessary, including the provision of exclusive turn lanes and potentially a traffic signal if warrant criteria is met.

- State Route 49 @ State Route 104/Ridge Road

Turn lanes and the County's first traffic signal were completed at this intersection in 1994. These improvements should provide a high degree of service in the short term. Ultimately, with the construction of the SR 49 Bypass, demand at this intersection could increase, which could require additional turn lanes.

- State Route 88 @ Buena Vista Road

The lack of left turn lanes for SR 88 traffic causes operational problems at this intersection, particularly for heavy vehicles. This intersection will eventually be improved in conjunction with the SR 104 Ione Bypass, but left-turn lanes should be implemented for the eastbound and westbound approaches in the short term.

- State Route 104 @ Jackson Valley Road/State Route 104 (West junction)

This intersection is has experienced operational problems due primarily to the lack of turn lanes and the off-set alignment of the side-street approaches (i.e., the Jackson Valley Road east and the State Route 104 west junction approaches). Planned improvements include additional turn lanes and minor realignments to correct the off-set intersection.

- State Route 104 @ State Route 124 (East junction) in Ione

  This intersection is currently constrained by the poor horizontal alignment of the approach roadways. Given that this intersection is located in downtown Ione, limited opportunities exist for short term improvements. Ultimately, the demand will be reduced with the implementation of the SR 104 Ione Bypass.

- State Route 88 @ State Route 26 in Pioneer

  The skewed angle of this intersection limits sight distance for traffic accessing SR 88 from SR 26 at this location. As volumes increase on SR 88, this problem will worsen. Operational improvements such as minor widening and intersection realignment would enhance the operations of this intersection.

- State Route 88 @ Climax Road

  Increased demand at this intersection will likely require improvements, particularly with the upgrade of both SR 88 and this section of Climax Road. This intersection will likely be improved in conjunction with the implementation of the Pine Grove South Bypass, if not sooner.

- Shenandoah Road @ Fiddletown Road

  The Fiddletown Road approach to this intersection is a problem because of the steep grades and impaired sight distance. The Amador County Public Works Agency completed a study of potential improvements to this intersection. Recommendations include the addition of a separate eastbound lane for vehicles exiting Shenandoah Road onto Fiddletown Road.

Each of the improvement needs for the regional roadway system were categorized into short-range and mid-long range improvement lists. For the purposes of the RTP, the regional road system is defined to include all state highways, as well as the Ridge Road/Climax Road corridor. Regional improvements proposed for local funding are also identified. The State list is further stratified into those requiring STIP funds and those requiring SHOPP or Minor funds.

Short-Range Programs and Implementation - Regional Road System

Table 10 lists the single STIP-funded short-range improvement (i.e., the SR 49 Sutter Creek/Amador City Bypass). Because this project will encompass the entire County minimum for the 0-7 year period, this is the only short-range STIP-funded improvement proposed. Amador County considers this project to be the highest priority for implementation.

Although Caltrans is responsible for the SHOPP program, the County has input into those projects which are programmed for SHOPP funding (i.e., rehabilitation, operational and safety projects that do not increase capacity). Table 11 lists the short-range SHOPP projects that the County proposes to add to candidate list in Appendix C. In addition to the County's proposed projects, Table 11 shows the projects already programmed. The ACTC endorses these programmed projects and desires inclusion of other projects in future candidate lists.

Mid- to Long-Range Programs and Implementation - Regional Road System

Long-range planning projects for State highways are identified through the Caltrans System Planning Process, which involves an analysis of projected deficiencies and needed improvements for each state route. Improvements which could potentially be accomplished after the 1998 STIP are identified at this time. Table 12 shows the mid- to long-range improvements, including those programmed and those proposed for funding. Note that two projects currently on the candidate list are not supported by Amador County (i.e., Project 206A, the SR 49 Stage II truck climbing lane and Project 2400, SR 88 widening to five lanes east of SR 49 in Jackson). The County desires that these projects be removed from the candidate list, and the funds be programmed to the next highest priorities shown on Table 12.

Table 13 summarizes those SHOPP projects on the Candidate List, which the County endorses and those which the County proposes to be added to the Candidate List. The County is proposing to expedite implementation of certain SHOPP projects by applying a 10 percent local matching contribution using soon-to-be-adopted regional traffic mitigation fees (see Tables 11 and 13). Table 14 shows the important projects that the County proposes to utilize Minor program funding. The County proposes to expedite implementation of these projects by applying a 50 percent local matching contribution using the regional traffic mitigation fees.

Table 15 also summarizes the regional improvements that are planned to be fully funded using local sources. This list includes several new arterial and collector routes that provide some benefit to regional circulation. The majority of local funding is expected to be generated by the regional and local traffic mitigation fees and developer exactions.

Table 10
Amador County Short Range Capital Improvement Program (0 to 7 Years) for the Regional System
STIP-Funded State Highway Projects

Priority [1]	Funding Source	Project #	Route/PM	Location/Description	Est. 1997 Cost ($ in Thousands)	Construction Year	Projected Cost [2]
1	FCR (100 %)	2130C	49/R7.0-R11.9	Near Sutter Hill, from 0.1 mi. north of Jct. 104 to 0.2 mi. south of Rancheria Creek Bridge (Sutter Creek Bypass with the Torre Extension) Construct Expressway on New Alignment.	$ 15,880 (construction) $ 3,700 (right-of-way)	2002	$ 17,324 (construction) $ 4,163 (right-of-way)
				Total Cost	$ 19,580		$ 21,487
				Programmed Total			$ 16,827
				Unprogrammed Deficit			$ 4,660

Notes: [1] P = Already Programmed.
[2] Projections escalated at 2.2% per year for construction and right-of-way.

Table 11
Amador County Short Range Capital Improvement Program (0 to 7 Years) for the Regional System
SHOPP-Funded State Highway Projects

Priority [1]	Funding Source	Project #	Route/PM	Location/Description	Est.1996 Cost ($ in Thousands)	Construction Year	Projected Cost [2]
P	SHOPP (43%) Local (57%)	2307	49/5.9	Widen and signalize SR 49/88 intersection in Martell.	$ 951	1998	$ 980
P	SHOPP (100%)	2119	49/ 2.7-3.7	In Jackson, from Scottsville Blvd to South Avenue. Add continuous left-turn lane and shoulders.	$ 1,298	1998	$ 1,337
P	SHOPP (100%)	2102	49/ 1.3-2.8	Near Jackson, from 1.3 miles north of Calaveras Co. Line to Scottsville Blvd. Widen and rehab roadway.	$ 1,382	2000	$ 1,553
P	SHOPP (100%)	2592	88/42.0-54.7	Near Cooks Station to Foster Meadow Road - Widen and rehab roadway.	$ 5,835	1999	$ 6,378
P	SHOPP (100%)	2721	88/60.8-67.0	Two miles west of Tragedy Springs Rd to Silver Lake Forest Station - Widen and rehab roadway.	$ 4,872	1999	$ 5,324
P	SHOPP (100%)	207A	49/ 10.6-10.7	In Amador City at Amador Creek Bridge #26-016, Replace Bridge.	$ 1,133	1999	$ 1,254
1	SHOPP (90%) Local (10%)	N/A	88/7.4	Improvements to SR 88/SR 104/Jackson Valley Road east intersection southeast of Ione.	$ 750	2001	$ 870
2	SHOPP (90%) Local (10%)	N/A	88/6.1	Realign Buena Vista Road and add left turn pockets.	$ 620	2001	$ 718
3	SHOPP (90%) Local (10%)	N/A	88/3.2	Improvements to the Jackson Valley Road west intersection south of Ione.	$ 550	2002	$ 660
4	SHOPP (90%) Local (10%)	N/A	88/ 14.3-15.0	In Jackson from SR 49 to 0.1 miles east of Court St. Widen lanes and shoulders, improve intersections.	$ 800	2003	$ 955
5	SHOPP (90%) Local (10%)	N/A	88/ 22.7-23.6	Operational improvements (signals, flashing beacon, sidewalk, safety improvements) through Pine Grove.	$ 600	2004	$ 760
6	SHOPP (90%) Local (10%)	N/A	88/ 30.0-48.2	East of Pioneer, from 0.5 miles east of Defender Grade Rd to 2.2 miles east of Mehrten Springs. Construct turnouts and chain installation areas (por.)	$ 1,507	2004	$1,890
				Unprogrammed Total	$ 4,344 State $ 483 Local $ 4,827		$ 5,268 State $ 585 Local $ 5,853

Notes: [1] P = Already Programmed (not included in cost totals).
[2] Projections escalated at 3.0% per year for construction with right-of-way already escalated.
N/A = Not Applicable - Not on Caltrans Candidate List. This table reflects the priorities of Amador County.

Table 12
Amador County Mid-to-Long-Range Capital Improvement Program (8 to 20 Years) for the Regional System
STIP-Funded State Highway Projects

Priority	Funding Source	Project #	Route/PM	Location/Description	Est.1996 Cost ($ in Thousands)	Construction Year	Projected Cost [1]
1	County Shares (100%)	N/A	49/ 4.6-5.9	From SR 88 in Martell to Sutter Street in Jackson - widen road to add second southbound travel lane	$ 2,500	2010	$ 3,780
2	County Shares (100%)	N/A	88/ 22.2-23.8	From Climax Road to Mount Zion Road - construct two-lane roadway on new alignment (Pine Grove South Bypass)	$ 10,000	2012	$ 16,050
3	County Shares (50 %) Local (50 %)	N/A	104/ 4.0 - 88/ 6.1	From SR 104 north of Ione near Collings Road to SR 88 near Buena Vista Road - construct two-lane roadway on new alignment and improve Buena Vista Road (Interim West Bypass)	$ 4,500 (50 % FCR)	2012	$ 7,220
4	County Shares (100 %)	N/A	49/ 13.7-14.7	From SR 49 just north of the Dry Creek Bridge to jct. SR 16 - construct northbound passing lane	$2,000	2014	$3,400
5	County Shares (100%)	N/A	49/ 12.0-14.0	From 0.1 miles south of the Rancheria Creek Bridge to 0.2 miles north of the Dry Creek Bridge - construct improvements to alleviate congestion in Drytown (options include new route on either the Tonzi or Modified 3R alignment, or widening of existing SR 49.	$ 3,000	2016	5,420
6	County Shares (100%)	2739	88/ 63.3-65.7	East of Tragedy Springs from 0.2 miles west of Mud Lake Road to 0.1 miles west of Keys Road (portions) - construct additional passing lanes.	$ 4,360	2016	$ 7,730
7[2]	County Shares (100%)	2497	88/ 28.4-42.9	From 0.8 miles west of Pioneer Station to 1.9 miles east of Cooks Station (portions) - construct passing lanes and 2-way left-turn lane(s).	$ 11,473	2014	$ 14,710
Total					$ 37,833		$ 58,310

Notes:
[1] Projections escalated at 3% per year for construction with right-of-way already escalated.
[2] It is the County's desire for future candidate lists to phase this project in order to expedite completion of the most critical segment on the western end of the corridor, particularly in the Pioneer area.
This list intentionally excludes two Caltrans candidate projects (Project No. 206 A and 2400). Amador County prefers that the funds noted for these projects be diverted to the priority projects listed in this table.
N/A = Not applicable. Not on Caltrans Candidate List.

Table 13
Amador County Mid-Long Range (8-20 Years) Capital Improvement Program for the Regional System
SHOPP-Funded State Highway Projects

Priority	Funding Source	Project #	Route/PM	Location/Description	Est. 1996 Cost ($ in Thousands)	Construction Year	Projected Cost [1]
1	SHOPP (90%) Local (10%)	N/A	88/12.7	Improvements to the SR 88/SR 104/Ridge Road intersection in Martell.	$ 530	2005	$ 690
2	SHOPP (90%) Local (10%)	N/A	124/2.3	Improvements to the SR 124/SR 104/Shakeley Lane intersection in downtown Ione.	$ 650	2006	$ 870
3	SHOPP (90%) Local (10%)	N/A	49/ 15.8-17.2	In Plymouth from 0.9 miles south of Empire Street to Main Street, add median-divided left-turn bays with landscaping	$ 1,070	2006	$ 1,480
4	SHOPP (90%) Local (10%)	N/A	88/ 5.5	Improvements to the SR 88/SR 124 intersection south of Ione.	$ 550	2008	$ 910
5	SHOPP (90%) Local (10%)	N/A	88/ 8.2-9.8	Construct passing lanes from Rest Area to 0.8 miles east of SR 104 west jct.	$ 1,500	2010	$ 2,270
6	SHOPP (90%) Local (10%)	N/A	49/ 0.0-2.5	Construct shoulder widening and passing lane improvements from Jackson south City limits to Calaveras County line	$ 2,500	2012	$ 4,010
6	SHOPP (90%) Local (10%)	N/A	88/ 20.0±	Extend eastbound passing lane at Middle Fork Loop Road	$ 470	2014	$ 800
7	SHOPP (90%) Local (10%)	N/A	88/ 33.0-33.6	Widen and realign from Meadow Drive to Antelope Road (spot curve correction)	$ 380	2016	$ 690
				Total	$ 6,885 State $ 765 Local $ 7,650		$ 10,548 State $ 1,172 Local $ 11,720

Notes: [1] Projections escalated at 3% per year for construction with right-of-way already escalated.
N/A = Not Applicable - Not on Caltrans Candidate List. This table reflects the priorities of Amador County.

Table 14
Amador County Capital Improvement Program for the Regional System
Important Minor-Funded State Highway Projects

Priority [1]	Funding Source	Route/PM	Location/Description	Est.1996 Cost ($ in Thousands)
1	Minor (62 %) Local (38 %)	49/ 4.0-4.3	Signalize SR 49/88 intersection and SR 49/Main Street intersections in Jackson.	$ 326
2	Minor (50%) Local (50%)	88/20.8	Improvements to the SR 88/Irishtown Road/Clinton Road intersection west of Pine Grove.	$ 330
3	Minor (50%) Local (50%)	49/8.6	Realign and improve the Gopher Flat Road intersection in Sutter Creek.	$ 100
4	Minor (50%) Local (50%)	49/17.2	Improvements to the SR 49/Main Street/Shenandoah Road intersection in Plymouth.	$ 170
5	Minor (50%) Local (50%)	49/16.9	Realign and improve the Empire Street intersection in Plymouth.	$ 100
6	Minor (50%) Local (50%)	49/16.7	Realign and improve the Poplar Street intersection in Plymouth.	$ 80
7	Minor (50%) Local (50%)	49/9.2	Signalize the Sutter-Ione Road intersection in Sutter Creek.	$ 150
			Total	$ 667 State $ 589 Local $ 1,256

Notes: This table includes a selected list of Amador County's highest priority Minor-funded project.

Table 15
Amador County Capital Improvement Program for the Regional System
Important Locally-Funded Improvement Projects

Priority [1]	Funding Source	Route	Location/Description	Est.1996 Cost ($ in Thousands)
Regional	State (50%) Local (50%)	SR 104	Construct Interim West Bypass of Ione.	$ 4,500 (50% Local)
Regional	Local (100%)	Ridge/Climax Rd	Road upgrade improvements (lane and shoulder widening, passing lanes, intersection improvements)	$ 6,000
Regional	Local (100%)	New	Extend Wicklow Way from current terminus to Stoney Creek Rd.	$ 975
Regional	Local (100%)	New	Extend Sutter Street from Argonaut Drive to Hoffman Street and improve the SR 49/Sutter Street intersection.	$1,250
Regional	Local (100%)	SR 88	Widen to five lanes from SR 104 east jct. to SR 49 in Martell.	$ 3,100
Regional	Local (100%)	New	Extend Mission Boulevard from south terminus to SR 49 in Jackson.	$ 600
Regional	Local (100%)	SR 88	Construct passing lanes from Court Street to Previtali Rd.	$ 1,660
Regional	Local (100%)	New	Construct New Connector from SR 49/88 intersection in Martell to Argonaut Lane near Westview.	$ 1,250
Regional	Local (100%)	SR 88	Improve the Ridge Road/New York Ranch Road intersection.	$ 200
Regional	Local (100%)	SR 88	Construct turn lanes and access improvements adjacent to the Pioneer School.	$ 300
			Total	$ 19,835

Notes: This table includes a selected list of Amador County's highest priority locally-funded projects.

Benefits of the Regional Improvements

Each of the regional improvements was input into the County-wide traffic model to ensure that acceptable levels of service were maintained. The results indicated that all roadways would operate at LOS C or better with the improvements in place, except for the following locations in which it was decided that further improvements would be prohibitively expensive and detrimental to the environment:

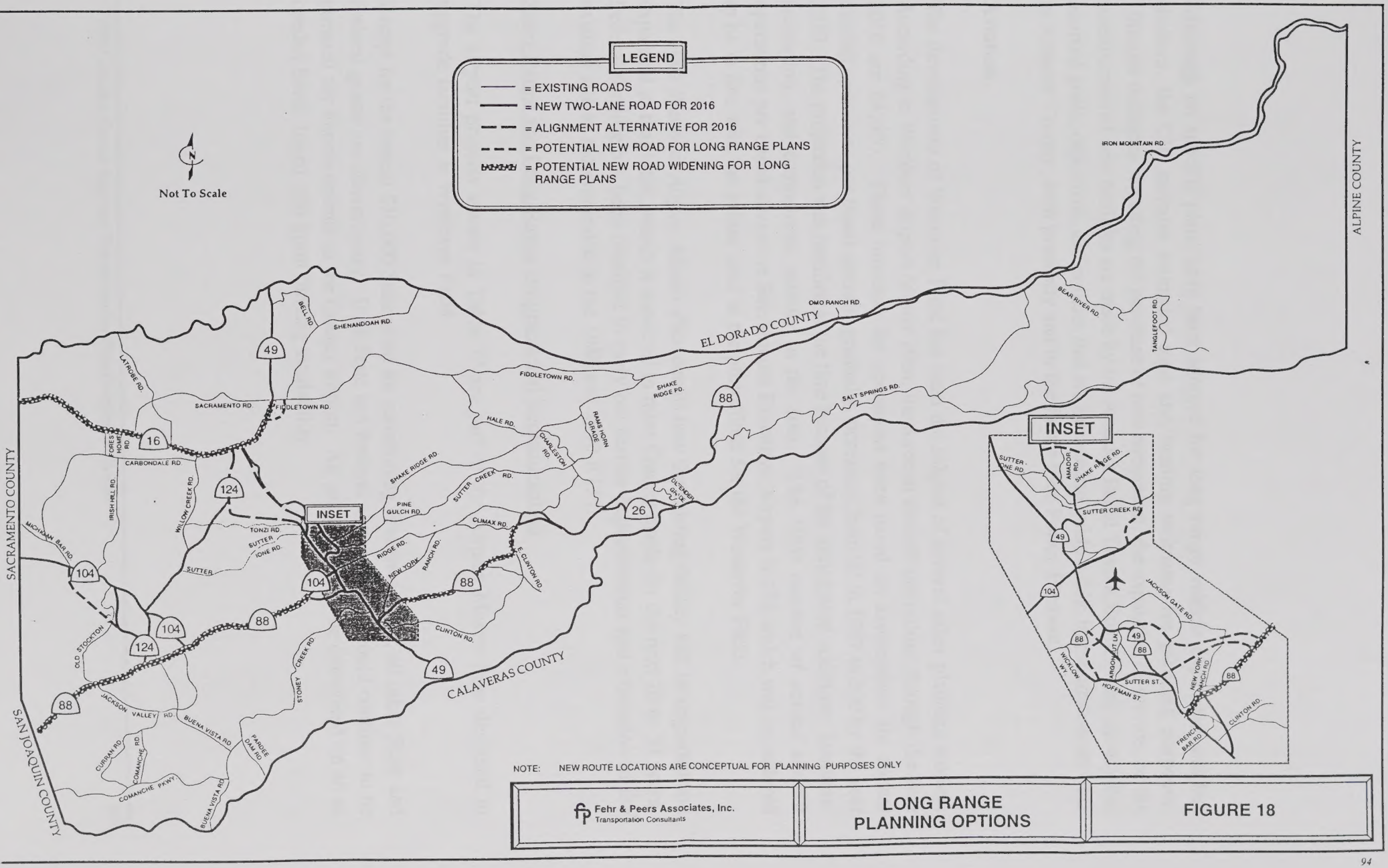
- SR 49 through Drytown;
- SR 88 from the San Joaquin County Line to SR 104 east near Martell; and,
- SR 88 from SR 49 in Jackson to Climax Road near Pine Grove.

Long Range Planning Options

In addition to the plans developed for the twenty-year horizon, the buildout condition (estimated around year 2060 based on population growth and holding capacity analysis) was analyzed to gain a perspective on the potential needs after 2016. The results indicated that a tremendous amount of improvements to the regional road system would be required to provide acceptable service for such a buildout scenario. Figure 18 displays several improvement options evaluated as Category 2 improvements that should be considered for long range planning purposes. These options would be in addition to the 20-year circulation plan improvements identified above. Many of these options involve the widening of existing roads to provide more capacity. Several of the new roadways shown were considered in this document and demonstrated potential merit, but not within the 20-year time frame.

Public Transit

The Amador Rapid Transit System (ARTS) currently provides local service throughout the western and central portions of Amador County. However, no public transit services currently connect Jackson to destinations outside of the County. In 1997, the ACTC completed *the Inter-County Transit Feasibility Study*, Nelson/Nygaard Consulting Associates, January, 1997. The study evaluated the feasibility of several options for implementing inter-county transit service between Amador County and downtown Sacramento. The study recommends implementation of a demonstration project that would provide fixed-route commuter bus service from Jackson and Ione to the CSUS light rail station and downtown Sacramento.



NOTE: NEW ROUTE LOCATIONS ARE CONCEPTUAL FOR PLANNING PURPOSES ONLY

Fehr & Peers Associates, Inc.
Transportation Consultants

LONG RANGE PLANNING OPTIONS

FIGURE 18

Although no specific plans have been adopted for long range vehicle expansion and bus shelters, the CIP includes estimated total and funding estimates for planning purposes. Ultimate decisions regarding the purchase of new equipment, the expansion of service, or the construction of new facilities are made by the Amador Rapid Transit Board. This agency has adopted goals, objectives, and policies that are intended to guide public transportation services in Amador County, both presently and in the future (See Policy Element).

Aviation

The development of Westover Field has been the subject of several other planning studies. According to *Westover Airport Master Plan*, the forecast aircraft operations through the year 2010 are 84,600. These forecasts for operations were based on assumptions for annual aircraft operations per based aircraft, gradually increasing from 92 in 1987 to 300 by the year 2010. The projection was justified at the time because of the anticipated additional business, recreation, and commercial activity in the area. The 1990 number of annual aircraft operations per based aircraft at Sacramento Executive Airport is 275 which was considered to be in line with the values used in the projections for the Westover Field.

The 1991 *Westover Airport Master Plan* details how the existing facility will be upgraded and expanded to that limit, which is expected to meet County needs for the next 20 to 30 years. Federal funding has been obtained to carry out certain improvements and expansion of the existing site as recommended in the 1988 and 1990 RTPs.

Short-Range and Long-Range Programs and Implementation

The airport projects shown in Table 17 are part of the Airport Master Plan designed to upgrade facilities at Westover Field.

Except for the annual $10,000 State grant for maintaining Westover Field, all other State and Federal grants are discretionary. Both State and Federal airport funds should continue to be pursued for improvements to the County airport. All projects are to be completed on an as needed basis, based also upon funding availability.

Table 17 SHORT-RANGE AND LONG-RANGE AVIATION IMPROVEMENTS		
Project Description	Cost	Funding Source
Closed Circuit TV Security System	$66,220	Airport
Widen Connecting TW, Slurry Taxilanes & Aprons	$33,529	State
Overlay Tie Down Area	$172,674	State
Construct TWs H & I	$60,352	State
Construct West Perimeter Access/Service Road	$70,000	FAA
Purchase Land NE Corner of Airport (4 Acres)	$800,000	FAA
New Aircraft Fuel Farm & Fuel Delivery System	$145,000	Airport
Reconstruct Drainage Between RW & TW at North End of RW	$80,000	FAA
Reconstruct Tiedown Area and Expand Parking	$300,000	FAA
Construct North/South TW to Parking	$50,000	FAA
Fuel Pad Apron	$145,000	Airport
Construct East/West TW	$75,000	FAA
Construct Wash Pad	$30,000	Airport
Access/Service Road, Terminal Area to Ridge Road, Approx 3,200 Feet	$515,000	FAA
New Auto Parking Area	$63,000	Airport
Airport Master Plan Update & ER/EA	$100,000	FAA
Construct West Tiedown Apron	$150,000	FAA
Reconstruct Main Apron	$100,000	State
Construct Phase 3 TWs	$125,000	FAA
New FBO/Hangar Complex	$100,000	Private
New Terminal/Administration Office Building	$140,000	Airport
Purchase 39 Acres of Land North of Airport	$950,000	FAA
Purchase Land on East Boundary of Airport (20 Acres)	$500,000	FAA
Purchase of 10 Acres of Land on the NW Corner of the Airport	$900,000	FAA
Purchase Land on North End of Airport (45 Acres)	$1,450,000	FAA

Table 17 SHORT-RANGE AND LONG-RANGE AVIATION IMPROVEMENTS		
Project Description	Cost	Funding Source
Slurry Seal RW and TW	$50,000	State
Land acquisition (parcels 1 through 7), construct access road, construct drainage detention pond	$11,754,000	Federal
Seal cost RW & TW; Master Plan Update	Not Available	Federal
Pave hangar area; Extend RW 400 ft	Not Available	Federal
Perimeter security fence; install closed circuit tv security system	$211,750	FAA/Airport
Construct connect TW; MITL; pavement maintenance program	Not Available	Federal
Purchase and install AWOS III	$92,234	Federal
Total	**$ 19,228,739**	
Source: Amador County Airport Officials, 1997.		

Bikeways and Pedestrian Facilities

As discussed in the assessment of needs section, the ACTC is in the process of developing a comprehensive Bicycle and Pedestrian Master Plan for all of Amador County. Although this plan will contain a list of improvements for bikeways and pedestrian improvements, the following improvements were programmed in the 1996 STIP for funding via the TEA program:

- Scenic improvements and traveler rest area for motorists and bicyclists on SR 49 in Plymouth; and,
- Pedestrian walkway and sidewalks in Sutter Creek.

Short-Range and Long-Range Programs and Implementation

Table 18 lists the short term and long term bicycle and pedestrian improvements that should be implemented as part of the 1996 RTP.

Table 18 SHORT-RANGE AND LONG-RANGE BICYCLE AND PEDESTRIAN FACILITY IMPROVEMENTS					
Improvement	Jurisdiction	Revenue Source [1]	Short-Range Cost	Long-Range Cost	Total Cost
SR 49 Beautification Project and Traveler Rest Area near Poplar Street	Plymouth	TEA Programmed in 1996 STIP	$399,000	$0	399,000
Pedestrian-actuated traffic signal crossing of SR 49 near Traveler Rest Area	Plymouth	Minor A	$100,000	$0	100,000
Bicycle Route Rest Area Facilities	Plymouth	EEM	$10,000	$0	10,000
Pedestrian Way Extension and Sidewalks	Sutter Creek	TEA Programmed in 1996 STIP	$30,000	$0	$30,000
Implement Bicycle/Pedestrian Master Plan Recommendations	Countywide	Various	N/A	N/A	N/A
		Total	**$539,000**	**N/A**	**N/A**

Notes: N/A = Not Available - does not include plans to be developed for the master plan update.
[1] Revenue Source Definitions: EEM = Environmental Enhancement &Mitigation Funds
TEA = Transportation Enhancements Activities Minor A = Caltrans Discretionary Fund
Source: 1994 Amador County Regional Transportation Plan/Circulation Element.

In general, bicycle route stops and rest areas should be developed in key locations throughout the County as short term improvements, particularly in the Cities and other urban areas such as Plymouth, Ione, Sutter Creek, Martell and downtown Jackson. These types of improvements involve a designated area for bicyclists to stop along a major route and will include such facilities as bike racks and lockers for storage. The County should also consider incorporating pedestrian actuated signal crossings should be incorporated into the signalization of key intersections, particularly in the urban areas of Jackson, Martell, Sutter Creek, Ione, Plymouth and Pine Grove.

Long term improvements will depend to a large degree on the recommendations from the Bicycle and Pedestrian Master Plan. These are likely, however, to include adding bike lanes to most state highways, county roads and city streets. Other improvements should include off-street facilities for bicyclists and walking as well as bicycle parking facilities.

Rail and Goods Movement

There is no direct rail passenger service available in the County. Most County residents obtain rail passenger service in Stockton, Sacramento, Oakland, or San Francisco. Rail freight service is provided by the Southern Pacific spur between Sacramento and Ione on a regular basis. The Amador Central Railroad has operated on call between Ione and Martell. However, this section of rail has recently been up for sale.

The County should work with Caltrans and each city to designate a comprehensive system of regional truck routes in which to channelize the impacts of heavy vehicles on certain streets. This effort should be coordinated with the County's pavement management system program.

Transportation Systems Management (TSM)

Existing and future traffic conditions can benefit from the application of TSM actions. Because most of the travel takes place by automobile, TSM actions should focus on improving the efficiency of the transportation system and reducing automobile demand.

The following TSM actions should be pursued to maximize the efficiency of the transportation system:

1. Continue investigation of the establishment of a formal ridesharing program as recommended in the *Inter-County Transportation Demand Management Feasibility Study*, Nelson/Nygaard Consulting Associates, January, 1997;

2. Construct a park-and-ride lot in the vicinity of the south City limits along SR 49 in Plymouth as a long-range improvement (estimated cost is $300,000);

3. Construct a park-and-ride lot in the vicinity of the SR 16 and SR 124 intersection in northwest Amador County as a short-range improvement (estimated cost is $300,000);

4. Construct a park-and-ride lot in Sutter Creek in the vicinity of SR 49 Bypass as long-range improvements (estimated cost is $300,000 each);

5. Construct a park-and-ride lot in the Martell area just east of Brown Road as a long-range improvement (estimated cost is $300,000); and

6. Inventory transportation system components as part of a TSM program to identify where TSM actions could improve traffic safety and operations.

Air Quality

Table 19 below summarizes the vehicle miles of travel and vehicle hours of delay as estimated by the traffic model for the base year (1990), 2006 and 2016 conditions. This information conveys the magnitude of the congestion at varying time frames.

Table 19
COMPARISONS OF REGIONAL TRAFFIC OPERATIONS IN AMADOR COUNTY

Traffic Model Scenario	Regional Vehicle Miles of Travel	Regional Vehicle Hours of Travel	Number of Trips
1990 Base Year	928,940	20,700	74,320
2006	1,331,160	29,780	100,740
2016	1,750,760	39,500	130,990

Note: All scenarios assume no additional roadway improvements.

As this shows, regional travel and congestion increase proportionally by approximately 2.27 percent annually between 1990 and 2006 and by 2.78 percent annually between 2006 and 2016. Based on the average annual increase in VMT and VHT, the results demonstrate that once the vehicle trips and miles of travel reach a certain level of capacity, the delay increases at a disproportionately higher rate.

Regardless of the severity, the Regional Transportation Plan must address the air quality impacts of the proposed Plan. The following steps are taken in the analysis:

1. Compute the regionwide vehicle miles of travel (VMT) and vehicle hours of travel (VHT) assuming buildout of the County without the RTP improvements in place;

2. Compute the regionwide VMT and VHT assuming buildout of the County with the RTP improvements in place;

3. Compute the average travel speeds for each scenario by dividing VMT by VHT.

4. Compute ozone precursor emission rates for varying average travel speeds for the buildout year based on the EMFAC7PC software; and

5. Compute the expected ozone pollutants for each scenario.

Table 20 below summarizes the results of the air quality analysis.

Table 20
AMADOR COUNTY AIR QUALITY ANALYSIS OF REGIONAL IMPROVEMENTS

Scenario	Regional VMT/Day	Regional VHT/Day	Avg. Speed (mph)	Ozone Precursor Emissions Rate (grams/mile)	Ozone Emissions (grams/day)
2016 w/o RTP	1,750,760	39,500	44.32	0.58	1,015,440
2016 w/ RTP	1,760,790	38,220	46.07	0.56	986,040
Difference	+10,030	-1,280	+1.75	-0.02	-29,400

As this information displays, the implementation of the RTP improvements will result in a net reduction of approximately 29,400 grams per day of ozone emissions. Although the total VMT is expected to increase due to the new routes proposed, the improvements result in a reduction in VHT (i.e., delays) which causes an increased average travel speed and reduced emissions.

V. FINANCIAL ELEMENT

PURPOSE

The purpose of the Financial Element is to provide a summary of the projected costs of transportation facilities listed in the RTP and the revenue sources required to fund those facilities. This section includes a summary of the costs to implement programs discussed in the Action Element (Chapter IV) and a discussion of the sources of revenue available to fund them. Surpluses and deficits resulting from the difference in projected revenues and planned expenditures are identified, along with the ramifications of implementing only those improvements which have secure funding. Finally, alternative sources of funding are recommended and a summary funding strategy is presented.

ROADWAY IMPROVEMENT FUNDING

Transportation financing has undergone a change over the last several years. With the focus of State funds on matching federal interstate moneys or relieving congestion in the largest urban areas, jurisdictions have increasingly depended on local funding for highway improvements, as well as local roadway improvements. The following provides a summary of the Federal, State, and local funding sources and programs available to Amador County.

Federal Sources/Programs

Intermodal Surface Transportation Efficiency Act - The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) is the current legislation guiding the federal funding of highways, transit, and planning. This Act provides a greater deal of flexibility for the State and local jurisdictions in deciding how federal dollars can be spent. The implementation of the federal program required implementing legislation in order to bring the State process in line with the new federal law. ISTEA expired on September 30, 1997 and a one-year extension was enacted until a new program is adopted in 1998.

Federal funding of ISTEA programs has not kept up with the original intent. According to California Transportation Commission staff, California has received less than 100 percent of its annual allocation of funds. The State has compensated for this difference through the annual redistribution of unobligated federal dollars. However, this effort has only provided between 92 and 95 percent of the expected allocation level.

ISTEA includes several programs that provide funding for Amador County. Each is briefly described below.

- Surface Transportation Program (STP) - This is the present federal program for the funding of highways, bridges, transit capital, and car pool projects. This program replaces the previous federal urban and secondary programs. Within a state, 10 percent of these funds goes for safety, 10 percent for transportation enhancement programs, 50 percent for urbanized areas over 200,000 population, and 30 percent discretionary within the state. Rural areas such as Amador County are guaranteed an amount based on previous "secondary" funding (FAS prior to ISTEA).

  The STP program has both a regional component (RSTP) and a statewide discretionary component. The regional component is split between Amador County and the ACTC. The County receives approximately $131,000 is RSTP funds each year. The ACTC's annual funding allocation for the last four fiscal years has averaged $124,400. The ACTC reserves its allocation for: 1) leverage other funds for important regional projects, or 2) provide loans to local jurisdictions for projects that will be reimbursed by the State. In FY 1996/97, the ACTC was allocated $160,900 resulting in a current fund balance of approximately $663,500. At this time, approximately $212,000 is obligated to the SR 49/88 project in Martell, leaving an available balance of $451,500.

  The STP program will need to be reauthorized along with the ISTEA in 1998. Assuming that this program, or one similar to it, remains in effect, the ACTC should receive approximately $2-3 million over the next twenty years. This estimate assumes no change in the average annual level of funding or the County/ACTC split of these funds.

- Transportation Enhancement Activities (TEA) - Amounting to over $200 million in California, TEA funds represent 10% of the statewide STP funds, but are separate from the local STP funds discussed above. TEA enhancements are defined as projects that go beyond the "normal" transportation project by involving a direct relationship to the intermodal transportation system.

  Areas eligible for TEA funding includes acquisition of scenic easements, scenic or historic highway programs, landscaping, rehabilitation of historic transportation buildings, preservation of abandoned railway corridors, and pedestrian/bikeway improvements and the acquisition of abandoned right-of-way for the conversion to

pedestrian/bike trails. The ACTC is responsible for ranking TEA projects countywide, but the California Transportation Commission makes final funding decisions. Several projects were programmed in the 1996 STIP for TEA funds including:

- Kennedy Mine Tailing Wheels restoration in Jackson ($103,000);
- Middle Bar Bridge Rehabilitation/Preservation ($300,000);
- SR 49 landscaping and beautification project in Plymouth ($399,000); and
- Pedestrian path, sidewalks and drainage improvements along SR 49 in Sutter Creek ($30,000).

The region (including Amador, Alpine, and Calaveras Counties can expect $1-3 million in TEA funding over the next 20 years.

- National Highway System (NHS) - This program designated a National Highway System which consists of Interstate and Defense Highways, and those principal arterials which are essential for interstate and interregional travel. This system replaces the previous Interstate and primary roads system. Twenty-one billion dollars is authorized for the NHS and $17 billion nationwide for interstate maintenance. Up to 50 percent of the NHS funds may be used to fund other road programs or transit. Up to 100 percent of these funds may be used for other programs in states with Clean Air Act non-attainment areas. Types of projects eligible for NHS funds include construction, operational improvements, safety, planning, and bicycle/pedestrian projects. State Route 88 was designated as an NHS route on September 30, 1995. However, no funding has been appropriated to date for NHS projects.

- Bridge Replacement Program - The Highway Bridge Replacement and Repair (HBRR) program provides funding for highway bridges in need of repair according to Federal safety standards. The government allocates 80 percent of the funds and the remaining 20 percent must come from local sources.

- Hazard Eliminiation and Safety Program Program - The Hazard Elimination and Safety (HES) program provides funding for improvements to facilities to eliminate travel hazards and to improve safety. Projects are nominated by local agencies and funds are allocated on a competitive basis.

U.S. Department of Forestry - The U.S. Department of Forestry (USDF) places a fee on all timber receipts from federal lands. Amador County receives 25 percent of these receipts, the

school district receives 25 percent, and the USDF receives the remaining half. These monies become part of the County Road Fund and are used for operational improvements.

Amador County applied for a $2.5 million grant through the Federal Forest Highway Program for Bear Valley Road. The grant has been awarded and the County in now in the process of complying with the project requirements. This program is administered by the Federal Highway Administration and the Forest Service. No local match is required. This source is limited and may not be available to a significant degree.

State Sources/Programs

The State transportation financing crisis experienced in 1994 appears to have been alleviated somewhat due largely to the passage of seismic retrofit bond measures in November of 1996. These funds will help minimize the use of the state highway account for use on seismic retrofit projects and increase the allocation for State Transportation Improvement Program (STIP) projects.

Projects currently programmed with various State and Federal funds are included in the 1996 STIP. The STIP is a seven-year funding program which is adopted biennially by April 1st in even-numbered years. The 1996 STIP covers the funding period through 2002/03. The 1998 STIP will cover through the year 2004/05. County minimums and the major State funding programs are briefly described below.

County Minimums - Each county in the State is mandated to receive a minimum allocation of statewide transportation funds on a quadrennial basis (four-year period). This allocation is determined by formula and is known as the "county minimum". The formula provides 60 percent of funds to the south State and 40 percent to the north State. Seventy percent of this money is allocated to counties based on population and highway mileage. The remaining 30 percent is for CTC discretionary purposes. A primary source of funding for the County minimums is the Motor Vehicle Fuel Tax.

The county minimum funding is comprised of two primary categories as outlined below.

1. Regional Choice/County Shares Program - Recently adopted State Senate Bill 45 directs that each Regional Transportation Planning Agency (RTPA) shall receive a direct apportionment of State highway funds for use on its regional priorities. The Amador County Transportation Commission (ACTC) is the

RTPA serving the Amador County region. The ACTC must decide its regional priorities through use of its RTP and then submit its highest priority candidate projects to the California Transportation Commission for programming in the Amador County Regional Transportation Improvement Program (RTIP). These major projects are then programmed for four year funding cycles, however, the first program will be a six year program running from 1998 to 2004.

Amador County's number one priority project, the Sutter Creek Bypass, received funding ($16.8 million) in the 1996 STIP. This amount was placed in the STIP prior to passage of SB 45 thanks in part to an offer of STIP funds from the neighboring Calaveras County Local Transportation Commission. In the 1998 STIP Amador County has requested, and Calaveras and Alpine Counties have supported, an additional $4.7 million in funds to extend the Sutter Creek Bypass around Amador City. In return, Amador County has agreed to offer its regional share of STIP funds to Calaveras and Alpine County projects through the next funding cycle or until at least 2008.

2. Interregional Improvement Program (IIP) - The IRR program is designed to provide funding for capacity-enhancements to routes designated on an Interregional Road system established by the State. These funds may then be bid by Caltrans and awarded by the California Transportation Commission to support statewide priorities. It is not certain whether any IIP program funds would be available to Amador County after the new SB 45 guidelines are established.

State Highway Operations & Protection Program (SHOPP) - The purpose of the SHOPP program is to maintain the integrity of the State Highway System. Formerly a part of the State Transportation Improvement Program (STIP), this program became independent as the former HSOPP in 1990. Funding for this program is provided through gas tax revenues. Projects are nominated within each Caltrans District office and are sent to Caltrans Headquarters for programming. Final project determinations are subject to CTC review.

SHOPP projects are based on statewide priorities within each program category (i.e., safety, rehabilitation, operations, etc) within each Caltrans District and are not subject to county minimums. SHOPP projects are based on priorities within each program category (e.g., safety, rehabilitation, operations) within each Caltrans District and are not subject to County minimums. SHOPP funds cannot be used for capacity-enhancing projects.

Minor Program - The Minor A Program is a District-discretionary funding program based on annual Statewide/District allocations. This program provides some level of discretion to Caltrans District Offices in funding projects up to $300,000. Minor B funds are used for projects up to $100,000. The advantage of this program is the streamlined nature of the funding process and the local nature of the decision making. Funding is competitive within the funds allocated to a given District.

Commuter and Urban Rail Transit Program - The Commuter and Urban Rail Transit Program is meant to fund projects that lead to an efficient system of commuter and urban rail transit throughout the State. This program has been allocated funding of $3 billion; however, only $1 billion was approved under Proposition 108 in June of 1990. Proposition 156, the second bond, failed to receive voter approval in 1992, as did Proposition 181 in November of 1994. Any further lack of bond funding will negatively impact the overall State funding program.

Proposition 116, also approved by the electorate in June of 1990, authorized another $2 billion for rail projects that are air-quality oriented, with a set aside for funding transit and other projects in rural counties. The 1996 STIP includes $1,182,000 in Proposition 116 funds programmed for the purchase of a bus maintenance facility, transit vehicles, land acquisition, and construction of transit shelters.

Environmental Enhancement and Mitigation (EEM) Program - Similar to TEA, the EEM offers funding to remedy environmental impacts of new or improved transportation facilities. Mitigation can include highway landscapes and urban forestry or development of roadside recreational facilities such as roadside rest stops, trails, scenic overlooks, trailheads, parks, and snow-parks. This grant program is managed by the State Resources Agency, although the CTC makes final funding decisions. Its cycle is annual, and is now in its fifth of ten years. Each cycle allocates $4 million to the Northern California counties. The application process is competitive with a $500,000 project cap, and is open to governmental or non-profit entities.

Local Sources/Programs

Traffic Mitigation Fees - Traffic mitigation fees are one-time charges on new development to pay for required public facilities, and to mitigate impacts created by the development or reasonably related to it. There are a number of approaches to charging developers for the provision of public facilities. In all cases, however, the fees must be clearly related to the costs incurred as a result of the development. AB 1600, which was passed to govern the imposition

of development fees, requires that a nexus, or rational connection, be made between a fee and the type of development on which the fee is based. Furthermore, fees cannot be used to correct existing problems or pay for improvements needed for existing development.

A county may only levy such fees in the unincorporated area over which it has jurisdiction. Any fee program to pay for regional facilities must have the cooperation of all jurisdictions in which future growth is expected to take place. Following is a list of the existing development impact fees currently being assessed within the County.

Amador County - Traffic mitigation fees in Amador County have been collected on an informal basis over the last several years. Generally, fees are applied to multi-unit developments as a part of the overall traffic mitigation requirements of the development. Fees are based on a schedule of $160 per average daily trip.

City of Jackson - The City of Jackson has been assessing fees on a project-by-project mitigation basis in a manner similar to Amador County. Fees are generally charged at $1,200 per single-family unit, and 60 percent of that, or $720, per multi-family unit. In the northeast sector of the City, the fee increases to $1,619 for a single-family unit. Non-residential land use is assessed on an individual project basis, but runs generally around $0.73 per square foot.

In addition to the project-mitigation fees, Jackson charges an adopted "buy-in" fee for bridge replacement and drainage. These fee revenues are intended to provide maintenance on existing facilities. The current fee is $2,400 to $2,500 per residential unit and $1.10 to $1.25 per non-residential square foot.

City of Ione - The City of Ione is in the process of developing an AB1600 development mitigation fee for traffic. Project mitigation fees are assessed on a project-by-project basis. The citywide traffic mitigation fees could be in the $1,200 to $1,600 per unit range. As currently being developed, these fees will cover localized improvements within four quadrants of the City.

Sutter Creek - The Sutter Creek traffic mitigation fee ordinance was instituted in August of 1991. The cost basis of the fee is spread 75 percent to traffic generators (e.g., residential units) and 25 percent to traffic attractors (e.g., non-residential development). Current fees are $2,250 per single-family unit, $1,980 per multi-family unit, and $50 per non-residential trip end.

Amador City and Plymouth - There are no identified traffic mitigation fees in Plymouth or Amador City. Furthermore, projected growth within these jurisdictions is too low to generate any substantial fee revenue for infrastructure improvements.

During the past two years, Amador County and the City of Jackson have used the County-wide traffic model to identify regional impacts of development proposals on a project-specific basis. To date, over a million dollars has been collected or credited toward planned improvements to the regional system. The Amador County Transportation Commission is currently working with each jurisdiction in Amador County to develop a uniform regional traffic mitigation fee program. It is anticipated that the regional fees will be collected for regional improvements and that a separate fee will be collected by each jurisdiction for local street improvements.

Development Mitigation Measures/Agreements - Development mitigation measures are imposed whenever developments require approval by a local entity. Generally, mitigation measures are imposed as conditions on tentative maps. These conditions reflect on- and off-site project mitigation that must be completed in order to be able to develop. Development agreements are also used to gain cooperation of developers in constructing off-site infrastructure improvements or dedicating rights-of-way needed as a result of the proposed development.

Local Transportation Funds - Local Transportation Funds (LTF) are available for transit, roadway, bicycle, and pedestrian purposes. LTF is derived from 1/4 cent of the State sales tax. These funds are returned to the county by the State. The ACTC then apportions the funds to the cities and county based upon population. Approximately 2% of the County's LTF is set aside for pedestrian and bicycle projects. The remaining funds are dedicated to provide transit service at levels required to meet reasonable transit needs. Any amounts not used for transit can be used for other transportation improvements, including street and road improvements. In recent years, little LTF remains available for streets and roads at the end of the allocation process.

Road Operations And Maintenance - Besides the major capital projects recommended in this transportation study, Amador County has significant, ongoing operations and maintenance (O&M) needs. To some extent, the funding for O&M and capital projects overlap. Therefore, it is important to understand the annual O&M budget and its funding sources. Each sources is briefly described below.

- *State Gas Taxes* - The State of California returns a portion of the statewide gas tax revenues to each jurisdiction for the purpose of maintaining roadways. These funds are restricted for use to the City's Road Fund and are accrued on an annual

basis. The formula for determining the amount of allocation to each City is complex, but primarily determined based on population.

- *Motor Vehicle In-Lieu Fees* - The Motor Vehicle In-Lieu Fees are motor vehicle registration funds returned to the County from the State based on a jurisdiction's population. These funds are General Fund revenues and are not restricted for roadway use. Therefore, the dedication of these funds to provide roadway O&M is essentially a use of General Fund revenues.

- *Local Transportation Fund (LTF)* - As stated above, any funds not allocated to transit, bicycle and pedestrian facility improvements can be used for road operations and maintenance.

- *Benefit Assessment Act of 1982* - The Benefit Assessment Act of 1982 allowed for the development of County-wide assessments for drainage, flood control, and street lighting. A 1989 amendment to the Act added street maintenance assessments. To date very few cities or counties have instituted this assessment for street maintenance.

Expected Revenues

During the development of the RTP, it is important to make reasonable estimates of expected revenues during the 20-year life of the Plan. The following assumptions were made in developing the estimated funding for regional improvements.

- Amador County will receive $20,000,000 in regional share STIP funds during the second half of the 20-year planning period (i.e., after 2008). This assumes completion of the cooperative agreement between Calaveras and Alpine Counties by 2008 and $10,000,000 becoming available per quadrennium thereafter.

- Amador County will receive no IIP Program funding during the 20-year planning period.

- Amador County will receive approximately $10,000,000 in SHOPP funding during the 20-year planning period beyond that already programmed. This equates to 50 percent of the historic average of approximately $1,000,000 per

year Amador County has received during the past several years. The remaining 50 percent would be allocated to rehabilitation projects, which are not included in this plan.

- Amador County will receive approximately $700,000 in important Minor-funded projects for application to regional improvements during the 20-year planning period.

- Proposition 116 will be used exclusively for transit and bicycle projects.

- LTF funds will be used for TDA administration, planning, priority bicycle and pedestrian facilities, transit, and street maintenance. They will not be available for traffic circulation capital improvements.

Comparison of Costs to Expected Revenues

Table 21 compares the expected costs of the state highway improvements to the expected revenues. As noted above, costs for improvements shown in the Action Element were only identified for projects that are not currently programmed.

Table 21
Summary of Costs and Revenues
State Highway Capital Projects

Improvement Projects	Short Range Costs	Mid-Long Range Costs	Total Costs	Estimated Funding	Surplus/ (Deficit)
STIP-Funded Projects	$4,660,000	$ 37,833,000	$42,433,000	$24,660,000	($17,833,000)
SHOPP-Funded Projects	$4,827,000	$ 7,650,000	$12,477,000	$10,000,000 State $0 Local	($1,229,000 State) ($1,248,000 Local)
Minor-Funded Projects	$1,256,000		$1,256,000	$667,000 State $589,000 Local	None
Locally Funded Projects	$19,835,000		$19,835,000	$0	($19,835,000)
Total	$76,001,000		$76,001,000	$35,916,000	($40,085,000)

Notes: Local funding is based primarily on implementation of the regional traffic mitigation fee program. All revenues and costs are in 1996 Dollars.

This information demonstrates that Amador County will face a deficit of approximately $40 million during the life of the plan. Implementation of the regional traffic mitigation fee program would eliminate deficits for important capacity-enhancing, SHOPP, and Minor-funded improvements. However, even after implementation of an aggressive regional traffic mitigation fee program, Amador County will face a deficit of more than $19 million over the twenty-year period.

Ramifications of Funding Shortfall

Without additional revenue sources, a number of important improvements would not be implemented by 2016. Of the $40 million deficit, approximately half could be made up by an aggressive regional traffic mitigation fee program. If that program is not implemented, several important locally funded projects would not be completed including the improvements to Ridge/Climax Road, the Interim West Bypass of Ione, the Wicklow Way/Sutter Street extension, Mission Boulevard in Jackson, and the widening of SR 88 in Martell. In addition, the lack of a local contribution to SHOPP and Minor projects would likely result in some of those listed improvements not being implemented.

The remaining 50 percent of the deficit is due to a lack of sufficient funds for STIP-funded projects. Based on the priorities set forth in this document, the following regional improvements would remain unfunded without additional revenue sources (if the regional traffic mitigation fee is implemented):

- Passing lanes and left-turn lanes on SR 88 from west of Pioneer Station to east of Cooks Station ($11,470,000);
- Passing lanes on SR 88 west of Mud Lake Road to west of Keys Road ($4,360,000); and
- Improvements on SR 49 through or around Drytown ($3,000,000).

Without these improvements, the up-country segments of State Route 88 would operate at LOS D and SR 49 through Drytown would operate at LOS E in 2016.

In order to make up the deficit that would remain even after a regional mitigation fee program is adopted, additional efforts must be seriously pursued. These should include pursuit of legislation for additional funds, maximum use of Federal and State grant-based programs, and implementation of a County-wide local option sales tax. A local options sales tax of ½ cent would raise approximately $28 million and resolve the remaining deficit.

PUBLIC TRANSIT IMPROVEMENT FUNDING

Funding for public transit systems is available from a variety of sources. The following is a brief description of the principal sources expected to be available, as well as projected revenues for Amador County.

Federal Sources/Programs

Funding for transit capital and operational costs is provided by the Federal Transit Act. The majority of these monies is designated, by law, for use in urban areas, and is not available for use by Amador County. However, there are provisions for some funding in rural areas.

Section 18 - The Surface Transportation Assistance Act of 1978 amended the Urban Mass Transportation Act of 1964 by adding a new Section 18, "Public Transportation of Non-Urbanized Areas." This program provides federal assistance for expenses of local non-urbanized areas (under 50,000 population). Funds may be used to provide fifty percent of the net project operating costs up to $15,000 and/or up to eighty percent of capital expenditures.

Funds for the Section 18 program are apportioned to each State on a formula basis. From this amount, three sources of Section 18 funding are provided. One source is known as County apportionment moneys. Sixty-five percent, or $15,000 per year, is allocated to each County on the basis of non-urbanized population, whichever is larger. Only eligible applicants within each county can apply for the County Apportionment moneys.

Section 16 - Section 16 of the FTA provides discretionary capital grant funds for vehicles and equipment to be acquired by private, nonprofit organization for special transportation services to Elderly and/or Handicapped persons. These funds are available on a case-by-case basis, with Federal Assistance providing 80% of the project's capital costs. The remaining 20% comes from other sources. In non-urbanized areas, projects eligible for Section 16 funding are to be included in a Transit Development Plan. These funds may also be available to public agencies under certain circumstances.

State Sources/Programs

Local Transportation Fund - The primary source of local funds used to operate ARTS in recent years has been the LTF, made available by Senate Bill 325 (1971) and amended. SB 325 is also known as the Transportation Development Act (TDA).

LTF funds are apportioned to transit within a County based on the ability of the transit system to meet the County's transit needs that are reasonable to meet. Historically, the transit allocation of LTF funds to ARTS has been 60 to 75 percent of the total LTF. The remaining funds will be used for LTF administration, taxi program set aside, bicycle facilities, and allocations to the six jurisdictions in the County.

State Transit Assistance Fund - Funding for public transportation is available from the State Transit Assistance fund (STA). These funds were established in 1979 under SB 620 and amended in 1982 under SB 215 and AB 251/SB 1335. Improvements to fuel efficiency have reduced the revenue from this fund. This may or may not change in the future, depending on the Administration's and Legislature's position regarding this fund and the relative price of fuel.

Local transportation planning agencies have in the past allocated these funds to operators of public transit (under formula basis) or allocate for streets and roads (under certain conditions). Amador County is normally entitled to funding under both of the above conditions. However, the primary intent of this legislation is to give priority consideration to claims to offset the unanticipated increases in the cost of fuel, to enhance existing public transportation services, and to meet high priority regional, County-wide, or areawide public transportation need. The money is placed in reserve for transit purposes and is maintained by the ACTC.

Proposition 116 - Proposition 116 makes capital funding available for rail, public transit, and bicycle projects statewide. No operating funds are included in this measure, and proof of availability of operating funds are one criteria for evaluating proposals. Funding is apportioned by the County, and administered through the area planning council. The 1996 STIP includes $1,182,000 from this fund for transit vehicle purchase, maintenance facility construction, and bus shelters. Project allocations beyond those already programmed are unlikely.

State Transit Capital Investment (TCI) (Capital Only) - The TCI program is one of the most complex and unpredictable of California's transit funding programs. It is funded from two sources: (1) sales tax revenue from the Transportation Planning & Development (TP&D) Account; and (2) fuel tax revenue from the State Highway Account. Funds under this program are appropriated annually for urban, commuter, inter-city guideways, and other transit capital needs.

The overall funding resources for this program have been variable. FY 1993/94 funding was approximately $81 million, while FY 1994/95 funding dropped to $44.5 million. In FY 1995/96 increased to $79 million, which resulted in a project funding level of $70,000 for Amador County. Half of this, or $35,000 was be provided through TCI funds. Applications can be made for funding above this minimum allocation.

Fares - Farebox recovery for the ARTS has traditionally run over 20 percent of total operating costs. Fares are collected from both general passengers as well as through contracts with other public agencies. Fluctuations in these contracts may cause overall fare revenue to vary from year-to-year.

Surface Transportation Program - As described under the general funding sources previously, State STP funds are available to fund transit capital projects. Besides the County formula allocation, 30 percent of the STP funds are available on a discretionary basis and can be used for transit purposes.

Comparison of Costs and Revenues

Table 22 summarizes the expected costs and revenues for transit capital improvements. No funding deficit is anticipated.

Table 22
Summary of Costs and Revenues
Transit Capital Projects

	Short Range Costs	Mid-Long Range Costs	Total Costs	Estimated Funding [1]	Surplus/ (Deficit)
All Projects	$ 880,950	$ 1,163,200	$ 2,044,150	$ 2,044,150	None

Notes: [1] Includes primarily Proposition 116 funds, LTF funds, and some developer mitigation.
All revenues and costs are in 1996 Dollars.

AVIATION

The Federal Airport Improvement Program (AIP) provides 90% Federal funding with 10% Local funding for general aviation airports. This program must be ratified annually by Congress and has experienced some major reductions in recent years.

AIP funds are derived from user charges such as taxes on aviation fuels, taxes on civil aircraft and a surcharge on air passenger fares, and can be used for most capital expenditures. The State of California Aid to Airports Program (CAAP) makes grant funds available for airport development and operations. This program underwent some major changes via AB 597, adopted in October 1993. The primary changes were an increase in annual grants from $5,000 to $10,000 per year and the dedication of approximately half of the CAAP funds for use as local match to the federal AIP program. The second change reduces the flexibility of the state funds for local airports.

Three types of state financial aid to publicly owned airports are available through the CAAP.

1. Annual Grants up to $10,000 per airport. These grants do not require matching funds but are constrained as to usage. For example, these funds can be used to match federal programs, but not state programs. Also, they cannot be used for hanger construction.

2. Acquisition Development Grants provide funds for up to 90% of the cost of qualified airport developments on a matching basis, to the extent that state funds are available.

3. Loans of 100% are available for projects with self-amortizing improvements. This will be a continuing source of funds for hangar construction at the airport.

State law (Public Utilities Code 21684) requires that the local government provide necessary local matching funds from non-Federal sources for any CAAP funds. These matching funds will be provided by the Airport Enterprise Fund. Grants are allocated based on a complex project rating methodology used by the state, with a similar methodology used for the federal AIP. The highest rated projects are those that relate to safety and State mandates.

Because of the competitive nature of the state and federal funding programs, it is difficult to accurately project potential revenue from these sources. Furthermore, the AB 597 split of funds between the AIP match and state acquisition and development grants, provides even less discretionary funds for state projects.

The ACTC has nominated several improvement projects for Westover Field. As shown in Table 17, these projects total $19,228,739. No funding deficits are anticipated assuming a reasonable level of success in acquisition of grant funding.

BICYCLE AND PEDESTRIAN IMPROVEMENT FUNDING

Several programs are available for the funding of bicycle and pedestrian improvement projects. However, funding for these projects tends to be limited and highly competitive. Following is a discussion of the major funding programs that may be used to fund these types of projects.

Transportation Enhancement Activities (TEA) - The TEA program, discussed under general funding sources above, can be a major source for bicycle path development. In Amador County, $30,000 has been granted to improve a pedestrian pathway along SR 49 in and near Sutter Creek, while $399,000 has been granted for a traveler rest area and landscaping improvements in Plymouth.

Local Transportation Funds - Local Transportation Funds (LTF) are partially available for bicycle and pedestrian purposes. LTF is derived from 1/4 cent of the State sales tax. These funds are returned to the region by the State. Approximately 2% of each areas LTF is set aside for pedestrian and bicycle projects. The FY 1995/96 proposed LTF set aside for Amador County is $8,600. Often these funds are used to repair sidewalks and install curb-cuts in sidewalks. They have also been used to support bicycle plans and facilities.

California Bikeways Act -- Bicycle Land Account (BLA) - BLA funds are available to jurisdictions that have approved bicycle transportation plans. Funds may be used to construct new bikeways, integrate bicycles with transit, install of traffic control devices, prepare bicycle plans, conduct safety education, and eliminate road hazards on existing bikeways. The state allocates $360,000 annually to this account on a statewide basis. Distribution of the funds are made on a competitive basis.

Environmental Enhancement and Mitigation (EEM) Program - The EEM program was discussed under general funding sources above. This program can be used for commuting bicycle facilities or other bicycle facilities that offset the environmental impacts of modified or new public transportation facilities.

Landscaping and Lighting Districts (L&L) - The Landscaping and Lighting Act of 1972 permits the installation, maintenance and servicing of landscaping and lighting through annual assessments on real property benefiting from the improvement. The act also permits construction and maintenance of appurtenant features including curbs, gutters, bike paths, walls, sidewalks or paving, and irrigation or drainage facilities.

A major advantage of L&Ls is that they can be established on a protest proceedings basis rather than with a 2/3 vote of the registered voters. In addition, the bond issuance costs are lower on L&L assessment bonds than on Mello-Roos CFD bonds. L&Ls can also be instituted along with the approval of large new developments that may be able to incorporate bikeways into the design of a new development.

Other Federal State and Local Grant Program - Various state and federal grant programs are available on a competitive basis over time. These generally include park-related improvements and pedestrian/bike trail improvements. Oftentimes these funds are segregated into road and non-road improvements. In addition, local grants and gifts of land or improvements dollars should also be pursued as they relate to the Class I bikeways.

Integration with Road Funding Programs - Bikeways are often an integral part of the local roadway system. Therefore, funding for bikeways can be integrated into the construction of new roads or widening and rehabilitation of existing roads. In this regard, most of the sources available for roadway construction can also be used for bikeways. These sources include: the federal STP and the State FCR programs, development impact fees, and project mitigations.

As shown in the Action Element, a number of bicycle and pedestrian projects are programmed in the 1996 STIP totaling $429,000. The unprogrammed total of $110,000 is proposed to be funded by Minor funds, EEM, and other local sources and programs. Additional funds will inevitably be necessary to fund the future bicycle improvements proposed in the County's updated master plan.

TSM IMPROVEMENT FUNDING

Many of the TSM improvements presented in the Action Element relate to policy-level programs the County should undertake to maximize the use of the existing transportation system. There are, however, capital improvements that are included in the RTP, specifically four park-and-ride lots with an estimated cost of $1,200,000 ($300,000 each). All of these are proposed to be funded from the regional traffic mitigation fee program.

OTHER POTENTIAL FUNDING SOURCES

As stated above, Amador County must undertake dramatic actions to ensure all improvement needs are funded. In addition to the sources already in use, there are several potential funding sources that Amador County should consider as potential solutions. The feasibility of these

funding sources will need to be determined over time. For purposes of planning, no revenue from any of these sources is assumed to be available prior to the year 2000.

Local-Option Sales Tax

In California, a sales tax is a levy on retail transactions and use categories as defined in the Revenue and Taxation Code. Up to a one-cent additional sales tax can be levied by county-created taxing authorities for the improvement of the transportation system, as authorized under the Local Transportation Authority and Improvement Act , Division 19, commencing with Section 180000 of the Public Utilities Code. Passage of the sales tax requires a majority vote of the county electorate according to the State Supreme Court regarding a recent court decision in Santa Clara County. In the past, the Amador County Board of Supervisors has rejected the idea of instituting a local option sales tax without a vote of the electorate.

The actual implementation of local-option sales taxes in rural counties have not been very successful. The issues surrounding such a sales tax measure are discussed in greater depth in the 1991 report by Nelson\Nygaard entitled *Amador County Transportation Sales Tax Final Report.* The parameters of the sales tax measure must be clearly defined when brought before the electorate. The tax may be up to 1 percent; however, it can be limited to a lower amount. Local option taxes are often more successful if the facilities or services that will be funded with the revenues are identified prior to the vote. If desired, the share that each jurisdiction receives from the new tax can also be determined prior to the vote. The duration of the tax may be limited in order to gain support, but it will be influenced by the total funding required and the degree to which bonds are needed for initial funding.

If instituted within Amador County by the year 2000, a sales tax would have the potential of generating $14 million by 2016 at a 1/4 cent rate, $28 million at a 1/2 cent rate, and $56 million at a one cent rate. These estimates are based on the projections developed for the 1994 RTP.

Motor Vehicle Fee

The State imposes fees on those who own and operate vehicles in the State. The California Vehicle Code and Revenue and Taxation Code provide authorization for the two primary means of assessing vehicle: registration and licensing. Currently, a county cannot impose vehicle registration fees other than those authorized under a special program which is exclusively for the use of financing emergency call box systems and for air-quality enhancement in non-attainment areas. Additional vehicle registration fees would require legislative approval.

Motor Vehicle Fuel Tax

A motor vehicle fuel tax is a surcharge on fuel. Counties are permitted to impose a per gallon tax on motor fuel sold within the county if a proposition granting the authorization is approved at an election by two-thirds of the voters. Such a tax would allow collection of moneys for new roadways from County residents as well as tourists purchasing gas within the County.

While such a tax would provide a direct link between the use of roadways and the payment of roadway facilities, a two-thirds affirmative electoral vote on such a tax increase may be very difficult to achieve in the current economic climate. Assuming such a tax was passed by the year 2000, revenue from this source would range from $1.1 million at 1 cent per gallon, to over $11 million at 10 cents per gallon.

Special Districts

Special districts can be used by a jurisdiction to obtain up-front financing for projects benefiting defined areas or developments. The two most commonly formed districts are assessment districts and Mello-Roos Community Facility Districts (CFDs). In addition, a Marks-Roos Bond Pooling Authority could be formed to pool the tax, assessment, or fee revenue from several jurisdictions or special districts for the purpose of selling bonds to construct public facilities.

The advantage of an assessment district or a Mello-Roos CFD is that facilities can be built ahead of the development that causes the need for those facilities. However, in many instances, any funding provided through a special district is offset by a credit in development fees.

Benefit Assessment

A benefit assessment is a charge levied against a property owner in order to pay for local improvements which directly benefit the owner's property. Counties can create assessment districts in unincorporated areas and cities can create districts in their jurisdictions. Most assessment districts are formed under the Streets and Highways Code and are used to finance local streets, water, and sewer extensions. Since assessment districts can only be used to finance improvements that benefit local property owners, their application to regional projects are limited.

FUNDING STRATEGY

As outlined above, the expected deficit for regional roadway improvements in approximately $40 million. In addition, deficits will exist for other non-automobile modes unless funding from grant programs is obtained. The following actions are needed to secure the necessary funding for improvements.

1. **Implement the Regional Traffic Mitigation Fee Program** - The ACTC is currently working with Amador County and each city to develop a uniform regional traffic mitigation fee program. As shown in the Financial Element, this funding source is critical for providing the necessary local funds for key regional improvements.

2. **Aggressively Pursue State Funding** - The ACTC and its member jurisdictions should continue to lobby the State legislature to provide additional revenue sources for State funding as soon as possible.

3. **Aggressively Pursue Discretionary and Grant-based Programs** - The ACTC and its member jurisdictions should aggressively pursue all avenues of discretionary and grant-based programs such as Federal programs, Minor A, TCI, EEM and others referenced in this document.

4. **Implement a County-wide Financing Mechanism** - In order to ensure funding is available, the County should implement a County-wide financing mechanism such as a local option sales tax. Although not typically popular in rural counties, an action such as this will be necessary to meet the County's needs. The extent to which these funds will be needed will depend on the funding made available from regional traffic mitigation fee program.

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VI. ENVIRONMENTAL REVIEW

Pursuant to Assembly Bill 69, Chapter 1253, Government Code, Amador County adopted its first Regional Transportation Plan (RTP) in 1975. The RTP was found to be subject to the California Environmental quality Act (CEQA) and an Environmental Impact Report was jointly prepared by Caltrans District 10 staff and the Transportation Commission staff. The EIR was to determine the significance of potential changes which would take place when the proposed transportation plan was introduced into the environmental setting (source: EIR Preface).

The 1975 EIR was an extensive and in-depth study of the environmental and social setting of Amador County. It was found by the LTC to be valid, applicable, and sufficient for mandatory RTP updates in 1976, 1977, 1978, 1980, 1982, and 1984. The 1986 RTP Update was again found to require no new EIR; however an addendum to the original EIR was prepared to span the decade which had passed. This addendum/update was deemed adequate for the 1988, 1990, 1992, 1993 and 1994 updates.

For the 1996/97 Update, the ACTC has prepared a significantly upgraded program-level environmental impact report. This separately-bound document discloses the general environmental impacts of the RTP Update/Circulation Element, and proposes programmatic mitigation measures to guide implementation of the improvements. This 1996/97 Update program EIR was processed for public review and adoption (certification) concurrent with the Draft RTP update public review and adoption process.